

				85					90					95			
Ala	Tyr	Asp	Phe	Ala	Ala	Tyr	Cys	Leu	Arg	Gly	Ser	Lys	Ala	Arg	Phe		
			100					105					110				
Asn	Phe	Pro	Asp	Ser	Pro	Pro	Glu	Ile	Pro	Cys	Ala	Ser	Ser	Leu	Ser		
		115					120					125					
Pro	Ser	Gln	Ile	Gln	Ala	Gly	Ala	Ala	Arg	Phe	Ala	Ala	Glu	Glu	Phe		
		130				135					140						
Gln	Met	Pro	Ser	Asp	Asp	Asp	Thr	Ala	Ser	Ser	Ser	Cys	Gly	Ser	Glu		
145				150					155						160		
Ala	Glu	Ser	Asp	Leu	Pro	Pro	Glu	Ile	Pro	Cys	Ala	Ser	Ser	Val	Ser		
			165					170						175			
Pro	Pro	Pro	Ile	Gln	Ala	Ala	Ala	Pro	Arg	Phe	Ala	Ala	Glu	Glu	Phe		
			180					185					190				
Arg	Leu	Pro	Ser	Asp	Glu	Asp	Thr	Ala	Ser	Ser	Ser	Cys	Gly	Ser	Val		
		195				200						205					
Thr	Glu	Ser	Asn	Ile	Asp	Ser	Gln	Gln	Ile	Ser	Ala	Glu	Gln	Gly	Ser		
	210				215						220						
Ala	Phe	Trp	Asp	Ser	Leu	Phe	Leu										
225				230													

<210> 1026

<211> 88

<212> PRT

<213> Pinus radiata

<400> 1026

His	Gln	Trp	His	Arg	Phe	Cys	Ser	Arg	Arg	Leu	Cys	Cys	Thr	Ala	Leu		
1			5					10					15				
His	Asn	Thr	Gln	Lys	Gln	Cys	Thr	Lys	Ser	Ala	Ala	Thr	Gly	Lys	Gly		
		20						25				30					
Gly	Ile	Lys	Arg	Ile	Arg	Arg	Gln	Gln	Glu	Ala	Ala	Pro	Ser	Pro	Pro		
		35				40					45						
Glu	Glu	Ala	Thr	Leu	Asn	Gln	Gln	Thr	Pro	Pro	Tyr	Arg	Gly	Val	Arg		
	50				55					60							
Arg	Arg	Asn	Trp	Gly	Lys	Trp	Val	Ser	Glu	Ile	Arg	Glu	Pro	Lys	Lys		
65				70					75					80			
Lys	Thr	Arg	Ile	Trp	Leu	Gly	Ser										
			85														

<210> 1027

<211> 501

<212> PRT

<213> Pinus radiata

<400> 1027

Met	Cys	Gly	Gly	Ala	Ile	Ile	Ser	Asp	Phe	Ile	Ile	Pro	Pro	Ala	Ser		
1			5					10						15			
Arg	Gly	Arg	Arg	Val	Thr	Ala	Arg	Asp	Ile	Trp	Pro	Asp	Phe	Asp	Lys		
		20						25				30					
Phe	Ser	Glu	Phe	Ile	Asn	Gly	Gly	Ala	Ala	Val	Glu	Ser	Phe	Asp	Val		
		35				40					45						
Ser	Val	Asp	Val	Asp	Asp	Asp	Glu	Glu	Asp	Ser	Asp	Asp	Asp	Glu	Phe		
	50				55					60							
Leu	Asp	Phe	Glu	Glu	Ser	Tyr	Gln	Asn	Lys	Lys	Lys	Lys	Gln	Gln	Gln		
65				70					75					80			
Pro	Ile	Ser	Pro	Thr	Lys	Gly	Phe	Glu	Leu	Pro	Leu	Ala	Arg	Gly	Leu		
			85					90					95				
Asp	Gly	Pro	Ala	Ala	Lys	Ser	Ala	Val	Arg	Lys	Arg	Lys	Asn	Leu	Tyr		
		100						105					110				
Arg	Gly	Ile	Arg	Gln	Arg	Pro	Trp	Gly	Lys	Trp	Ala	Ala	Glu	Ile	Arg		
		115				120						125					

Asp Pro Arg Lys Gly Ala Arg Val Trp Leu Gly Thr Phe Asn Thr Ala
 130 135 140
 Glu Glu Ala Ala Arg Ala Tyr Asp Ala Ala Arg Lys Ile Arg Gly
 145 150 155 160
 Lys Lys Ala Lys Val Asn Phe Val Asp Glu Pro Pro Pro Ser Val Lys
 165 170 175
 Lys Glu Ser Asn Asn Ala Lys Gly Ser Lys Lys Gly Ser Ser Lys Lys
 180 185 190
 Ile Lys Ser Tyr Thr Thr Pro Lys Ala Asp Phe Phe Glu Gly Phe Lys
 195 200 205
 Thr Ala Asn Pro Ser Ile Ala Gln Tyr Asn Phe His Gln Lys Phe Pro
 210 215 220
 Asn Pro Ser Cys Asp Asp Leu Gly Tyr Gln Asn Pro Leu Ser Pro Leu
 225 230 235 240
 His Ala Ile Cys Asn Arg Asn Phe Ala Ala Lys Gln Ser Ser Ser Ala
 245 250 255
 Leu Pro Ala Tyr Ser Thr Glu Phe Ser Asp Phe Asp Asp Ser Glu Val
 260 265 270
 Asp Asn Leu Val Pro Gln Pro Ala Ser Phe Glu Pro Met Lys Asn Ile
 275 280 285
 Asn Lys Arg Lys Gly Tyr Asn Ser Phe Glu Ser Asp Thr Ser Ser Val
 290 295 300
 Ser Ala Asp Arg Ser His Ile Ser Trp Val Thr Glu Val Lys Thr Pro
 305 310 315 320
 Glu Ile Ser Ser Val Pro Lys Ala Glu Ala Asp Ser Asp His Tyr Asp
 325 330 335
 Phe Ala Asp Met Ser Thr Pro Val Ala Thr Ser Val Ser Ala Gly Ser
 340 345 350
 Pro Glu Val Gln Leu Pro Pro Phe Asn Asn Gly Leu Asn Lys Ser Pro
 355 360 365
 Ser Val Glu Asp Gly Val Ala Ala Glu Lys Ser Pro Lys Leu Glu Glu
 370 375 380
 Ser Ser Gln Leu Glu Ile Ser Glu Asp Leu Pro Ser Leu Glu Ser Tyr
 385 390 395 400
 Pro Trp Leu Phe Gln Met Pro Tyr Phe Glu Gly Leu Asp Gln Ser Leu
 405 410 415
 Gln Gly Val Gly Ile Gly Asp Ala Ser Phe Pro Asp Gly Glu Asn Asp
 420 425 430
 Leu Gln Leu Trp Ser Phe Asp Ala Val Pro Ile Ser Asp Ser Ala Tyr
 435 440 445
 Ile Ser Leu Glu Ser Leu Ala Cys Lys Gln Leu Val Ile Met Glu Ser
 450 455 460
 Arg Arg Leu Val Met Ala Ser Phe Cys Arg Pro Ser Ser Asn Arg Glu
 465 470 475 480
 Leu Val Ile Phe Pro Leu Phe Phe Phe Ile Gln Phe Asp Gly Ala Thr
 485 490 495
 Val Ile Ser Ala His
 500

<210> 1028

<211> 134

<212> PRT

<213> Pinus radiata

<400> 1028

Met Ala Phe Ala Gly Thr Gln Gln Lys Cys Lys Ala Cys Glu Lys Thr
 1 5 10 15
 Val Tyr Val Val Asp Gln Leu Thr Ala Asp Gly Ser Val Phe His Lys
 20 25 30
 Ala Cys Phe Arg Cys His His Cys Asn Gly Thr Leu Lys Leu Ser Asn
 35 40 45

Tyr Ser Ser Phe Glu Gly Val Leu Tyr Cys Lys Pro His Phe Asp Gln
 50 55 60
 Leu Phe Lys Arg Thr Gly Ser Leu Asp Lys Ser Phe Glu Gly Thr Pro
 65 70 75 80
 Lys Ala Val Lys Asn Glu Lys Leu Asn Asp Gly Glu Ile Lys Thr Pro
 85 90 95
 Asn Arg Val Ser Ala Leu Phe Ser Gly Thr Gln Glu Lys Cys Leu Ala
 100 105 110
 Cys Gly Asn Thr Val Tyr Pro Ile Glu Lys Val Ser Val Glu Gly Val
 115 120 125
 Gly Tyr His Lys Ala Cys
 130

<210> 1029
 <211> 76
 <212> PRT
 <213> Pinus radiata

<400> 1029
 Met Asp Gly Ser Gln Asn Ser Gly Gly Asn Ala Val Pro Pro Phe Leu
 1 5 10 15
 Thr Lys Thr Tyr Asp Met Val Asp Asp Ser Ser Thr Asp Ser Ile Val
 20 25 30
 Ser Trp Ser Pro Gly Asn Asn Ser Phe Ile Val Trp Asn Pro Pro Glu
 35 40 45
 Phe Ala Arg Asp Leu Leu Pro Lys Tyr Phe Lys His Asn Asn Phe Ser
 50 55 60
 Ser Phe Val Arg Gln Leu Asn Thr Tyr Gly Phe Arg
 65 70 75

<210> 1030
 <211> 97
 <212> PRT
 <213> Pinus radiata

<400> 1030
 His Glu Lys Lys Ala Val Leu Trp Asn Met Asp Thr Leu Lys Ala Lys
 1 5 10 15
 Gly Ser Leu Glu Glu His Ser Phe Leu Ile Thr Asp Val Arg Phe Ser
 20 25 30
 Pro Asn Ser Thr Arg Leu Ala Thr Ser Ser Phe Asp Arg Thr Val Lys
 35 40 45
 Val Trp Asp Ala Asp Asn Pro Asn Tyr Thr Leu Arg Thr Phe Ser Gly
 50 55 60
 His Thr Gly Ser Val Met Ser Leu Asp Phe His Pro Asn Asn Glu Asp
 65 70 75 80
 Leu Ile Cys Ser Cys Asp Gly Glu Ser Glu Val Arg Tyr Trp Ser Val
 85 90 95
 Asn

<210> 1031
 <211> 117
 <212> PRT
 <213> Pinus radiata

<400> 1031
 Met Gly Tyr Leu Gln Glu Leu Glu Asp Gln Ile Ile Gly Leu Gln Asn
 1 5 10 15
 Leu Val Lys Arg Asn Glu Arg Leu Tyr Gly Ser Gly Asn Thr Pro Ser
 20 25 30

Gly Gly Val Ala Leu Pro Phe Ile Leu Val Gln Thr Arg Pro Gln Ala
 35 40 45
 Thr Val Glu Ile Glu Ile Ser Glu Asp Met Gln Leu Val His Phe Asp
 50 55 60
 Phe Asn Ser Thr Pro Phe Glu Leu His Asp Asp Ala Tyr Val Leu Lys
 65 70 75 80
 Ala Met Gly Phe Cys Glu Lys Pro Phe Thr Asp Gly Met Asp Val Thr
 85 90 95
 Gly His Asp Ser Phe Ala Asn Gly Thr Gly Phe Gly Glu Asn Asn Met
 100 105 110
 Thr Ile Thr Asn Met
 115

<210> 1032

<211> 146

<212> PRT

<213> Pinus radiata

<400> 1032

Thr Arg Val Leu Leu Ile Asp Asp His Pro Leu Phe Arg Glu Gly Leu
 1 5 10 15
 Ala Gly Ala Ile Gln Ala Glu Pro Asp Phe Glu Val Val Gly Gln Ala
 20 25 30
 Gly Thr Val Asp Glu Leu Arg Gly Leu Ala Pro Gln Ile Glu Pro Asp
 35 40 45
 Val Ala Ile Val Asp Leu Leu Met Pro Ser Val Ser Gly Ile Gly Val
 50 55 60
 Thr Arg Glu Leu Cys Glu Leu Leu Pro Arg Cys Arg Val Leu Gly Leu
 65 70 75 80
 Ser Ala Val Val Asp Ala Ala Ala Ile Ala Glu Met Leu Arg Ala Gly
 85 90 95
 Ala Ser Gly Phe Ala Leu Lys Thr Gln Pro Ala Pro Asp Ile Leu Asp
 100 105 110
 Ala Val Arg Arg Thr Val Ala Gly Glu Ser Tyr Leu Pro Pro Ser Val
 115 120 125
 Ser Arg Glu Ala Ile Asp Ala Glu Leu Ala Gly Gly Ala Pro Pro Ser
 130 135 140
 Leu Ala
 145

<210> 1033

<211> 181

<212> PRT

<213> Pinus radiata

<400> 1033

Met Ser Ile Leu Pro Lys Ser Asp Ser Ile His Ile Arg Glu Val Trp
 1 5 10 15
 Ala Asp Asn Leu Glu Glu Glu Phe Asn Leu Ile Arg Glu Ile Val Asp
 20 25 30
 Asp Tyr Pro Leu Ile Ala Met Asp Thr Glu Phe Pro Gly Ile Val Val
 35 40 45
 Arg Pro Val Gly Lys Phe Arg Thr Val Gln Glu Tyr Asn Tyr Glu Thr
 50 55 60
 Leu Arg Ser Asn Val Asp Val Leu Lys Leu Ile Gln Leu Gly Leu Thr
 65 70 75 80
 Phe Ser Asp Glu Asp Gly Asn Leu Pro Asn Cys Gly Thr Asp Arg Tyr
 85 90 95
 Cys Val Trp Gln Phe Asn Phe Arg Glu Phe Asn Ile Trp Glu Asp Ala
 100 105 110
 Tyr Ala Ser Asp Ser Ile Glu Leu Leu Arg Gln Ser Gly Ile Asp Phe

115 120 125
 Lys Lys Asn Ser Glu Arg Gly Val Asp Ser His Leu Phe Ala Glu Leu
 130 135 140
 Leu Met Ser Ser Gly Ile Val Leu Asn Glu Asn Val Arg Trp Ile Thr
 145 150 155 160
 Phe His Ser Gly Tyr Asp Phe Gly Tyr Leu Leu Lys Leu Val Met Asn
 165 170 175
 Arg Ser Leu Pro Pro
 180

<210> 1034
 <211> 122
 <212> PRT
 <213> Pinus radiata

<400> 1034
 Glu His Ala Cys Pro Met Ala Cys His Pro Gly Pro Cys Pro Pro Cys
 1 5 10 15
 Leu Val Ser Val Ser Lys Ser Cys Trp Cys Gly Ser Lys Thr Leu Val
 20 25 30
 Ser Arg Cys Ser Val Leu Asn Lys Gly Thr Ser Thr Asn Ala Gly Val
 35 40 45
 Gly Pro Val Leu Ser Cys Gly Gln Pro Cys Gly Arg Leu Leu Gly Cys
 50 55 60
 Glu Lys His Thr Cys Glu Gln Glu Cys His Pro Gly Pro Cys Pro Pro
 65 70 75 80
 Cys Asp Ile Val Asp Val Ala Lys Cys Tyr Cys Gly Arg Gln Glu Arg
 85 90 95
 Gly Met Ala Cys Gly Thr Gly Ile Val Glu Thr Cys Val Val Glu Gly
 100 105 110
 Glu Gly Ser Trp Glu Gly Arg Trp Gln Cys
 115 120

<210> 1035
 <211> 158
 <212> PRT
 <213> Pinus radiata

<400> 1035
 Met Arg Ile Asn Glu Ala Thr Pro Lys Lys Ser Leu Gly Phe Gln Gln
 1 5 10 15
 Pro Tyr Ser Met Lys Gly Asn Tyr Tyr Thr Gln Ala Tyr Gly Gly Ala
 20 25 30
 Val Ala Ser Gln Ala Phe Gln Ser Asp Asn Asp Pro Asn Asn Thr Thr
 35 40 45
 Ile Phe Val Gly Gly Leu Asp Pro Asn Ala Thr Asp Glu Asp Leu Arg
 50 55 60
 Gln Val Phe Gly Pro Tyr Gly Glu Ile Val Tyr Val Lys Ile Pro Val
 65 70 75 80
 Gly Lys Gly Cys Gly Phe Val Gln Phe Thr Asn Arg Ser Ser Ala Glu
 85 90 95
 Glu Ala Leu Gln Lys Leu His Gly Thr Val Ile Gly Gln Gln Ser Ile
 100 105 110
 Arg Leu Ser Trp Gly Arg Ser Pro Ala Asn Lys Gln Thr Ala Ser Trp
 115 120 125
 Gly Val Gln Pro Gln Ala Asp Pro Asn Gln Trp Asn Gly Gly Gly Ala
 130 135 140
 Tyr Tyr Gly Tyr Gly Gln Gly Tyr Glu Ala Tyr Gly Tyr Ala
 145 150 155

<210> 1036

<211> 126
 <212> PRT
 <213> Pinus radiata

<400> 1036
 Gln Tyr Leu Ser Pro Gly Lys Ser Ala Pro Phe Trp Leu Cys Gln Asp
 1 5 10 15
 Met Ala Ile Thr Ser Gln Gln His His Met Asn Ala Leu Pro Tyr Asn
 20 25 30
 Glu Arg Ser Glu Lys Arg Pro Lys Phe Lys Gly Ile Arg Met Arg Lys
 35 40 45
 Trp Gly Ser Trp Gly Ser Glu Ile Arg Met Pro Lys Thr Arg Thr Lys
 50 55 60
 Ile Trp Leu Gly Ser Tyr Glu Thr Ala Glu Gln Ala Ala Arg Ala Tyr
 65 70 75 80
 Asp Ala Ala Leu Tyr Cys Leu Arg Gly Pro Asn Ala Lys Phe Asn Phe
 85 90 95
 Pro Asp Thr Val Pro Ser Ile Pro Ser Ala Phe Ser Leu Ser Arg His
 100 105 110
 Gln Ile Gln Leu Ala Ala Ala Arg Tyr Ala Arg Asp Glu Leu
 115 120 125

<210> 1037
 <211> 79
 <212> PRT
 <213> Pinus radiata

<400> 1037
 Met Glu Pro Met Asp Ile Val Gly Lys Ser Lys Asp Asp Val Ser Leu
 1 5 10 15
 Pro Lys Ala Thr Met Phe Lys Ile Ile Lys Glu Met Leu Pro Pro Asp
 20 25 30
 Val Arg Val Ala Arg Asp Ala Gln Asp Leu Leu Val Glu Cys Cys Val
 35 40 45
 Glu Phe Ile Asn Leu Ile Ser Ser Glu Ser Asn Glu Val Cys Gly Arg
 50 55 60
 Glu Glu Lys Arg Thr Ile Ala Pro Glu His Val Leu Arg Ala Leu
 65 70 75

<210> 1038
 <211> 132
 <212> PRT
 <213> Pinus radiata

<400> 1038
 Glu Ile Ser Leu Phe Trp Leu Gln Ser Phe Cys Lys Leu Pro Asn Met
 1 5 10 15
 Glu Asn Val Pro Glu Gln Glu Pro Asp Asn Thr Ile Ser Leu Pro His
 20 25 30
 Glu Asp Arg Gly Ser Arg Gln Phe Lys Gly Ile Arg Leu Arg Lys Trp
 35 40 45
 Gly Ser Trp Val Ser Glu Ile Arg Met Pro Arg Ser Arg Lys Lys Ile
 50 55 60
 Trp Leu Gly Ser Tyr Thr Thr Pro Glu Gln Ala Ala Arg Ala Tyr Asp
 65 70 75 80
 Ala Ala Val Tyr Cys Leu Arg Gly Arg Asn Ala Glu Phe Asn Phe Ser
 85 90 95
 Val Pro Asp Ile Pro Thr Ala Ser Pro Leu Ser Arg Glu Gln Ile Gln
 100 105 110
 His Ala Ala Ala Glu Tyr Ala Leu Gly Lys Ala Pro Ser Ser Phe Pro
 115 120 125

Ser Phe Ala Gly
130

<210> 1039
<211> 241
<212> PRT
<213> Pinus radiata

<400> 1039
Met Asn Glu Pro Asp Glu His Ala Ala Ala Gln Leu Val Gln Lys Arg
1 5 10 15
Ser His Pro Leu Ala Glu Val Val Met Pro Ile Ser Val Arg Pro Leu
20 25 30
Ala Glu Lys Cys Gly Val Glu Ala Glu Glu Glu Arg Lys Arg Ala Ala
35 40 45
Glu His Lys Lys Gln Arg Ser Lys Asn Trp Thr Arg Ala Glu Thr Leu
50 55 60
Lys Leu Ile Arg Leu Arg Ala Glu Met Glu Pro Arg Phe Ala Arg Ser
65 70 75 80
Gly Arg Lys Ser Glu Leu Trp Glu Glu Ile Ala Glu Ala Leu Arg Arg
85 90 95
Glu Ser Val Val Arg Asp Ala Gln Arg Cys Arg Asp Lys Trp Glu Lys
100 105 110
Leu Thr Ala Ser Tyr Lys Glu Val Arg Asp Gly Gln Arg Asp Arg Gln
115 120 125
Asp Phe Pro Phe Phe Asp Glu Leu Asp Pro Leu Leu Ser Leu Lys Pro
130 135 140
Gln Lys Ala Ala Ala Ala Ala Ala Ala Ala Ala Thr Ala Ala Thr Ala
145 150 155 160
Ala Asn Phe Val Ser Ala Glu Thr Pro Ser Asn Phe Pro Thr Asp Asp
165 170 175
Glu Met Thr Glu Glu Gly Ser Pro Ala Gly Lys Arg Arg Lys Thr Thr
180 185 190
Pro Arg Gly Leu Ser Ala Thr Asp Leu Asp Ala Val Arg Glu Leu Leu
195 200 205
Glu Ser Leu Val Ser Arg Gln Gln Arg Phe Phe Val Asp Leu Leu Asp
210 215 220
Ser Met Glu Arg Lys Glu Glu Ile Arg Glu Arg Ile Arg Gln Glu Lys
225 230 235 240
Glu

<210> 1040
<211> 182
<212> PRT
<213> Pinus radiata

<400> 1040
Met Val Tyr Ile Val Leu Leu Asp Leu Cys Glu Ser Val Gln Pro Pro
1 5 10 15
Gln Gly Ser Leu Gln Glu Phe Ser Asn Ser Ile Gln Glu Glu Gln Ala
20 25 30
Met Val Asp Leu Met Pro Lys Asp Ser Arg Gln Thr Met Ile Asn Asn
35 40 45
Thr Thr Ile Phe Val Gly Arg Leu Asp Pro Asn Ala Thr Asp Glu Asp
50 55 60
Leu Arg Gln Val Phe Gly Gln Tyr Gly Asp Leu Val Ser Ile Lys Ile
65 70 75 80
Pro Val Gly Lys Gly Cys Gly Phe Val Gln Phe Ala Asn Arg Ala Cys
85 90 95
Ala Glu Glu Ala Leu Gln Arg Leu His Gly Thr Val Ile Arg Gln Gln

```

      100                      105                      110
Thr Ile Arg Leu Ser Trp Gly Arg Ser Pro Ala Asn Lys Gln Asn Ser
      115                      120                      125
Gln Pro Gln Gly Gln Gln Pro Gln Ser Asp Pro Asn Gln Trp Asn Gly
      130                      135                      140
Ala Tyr Tyr Gly Gln Gly Tyr Glu Ser Tyr Gly Tyr Ala Pro Pro Pro
145                      150                      155                      160
Gln Asp Pro Ala Met Tyr Ala Tyr Gly Gly Tyr Pro Gly Tyr Gly Asn
      165                      170                      175
Tyr Asn Gln Gln Val Ser
      180

```

<210> 1041
 <211> 66
 <212> PRT
 <213> Pinus radiata

```

      <400> 1041
Thr Ser Tyr His Arg Pro Cys Phe Lys Cys Cys His Gly Gly Cys Val
  1                      5                      10                      15
Ile Ser Pro Ser Asn Tyr Val Ala His Glu Gly Arg Leu Tyr Cys Arg
      20                      25                      30
His His Ser Ser Gln Leu Phe Arg Glu Lys Gly Asn Phe Ser Gln Leu
      35                      40                      45
Ser Lys Ala Thr Pro Thr Lys Gly Val Thr Glu Asn Ser Asp Thr Asp
      50                      55                      60
Asp Lys
65

```

<210> 1042
 <211> 152
 <212> PRT
 <213> Pinus radiata

```

      <400> 1042
Val Gly Gly Gly Gly Gly Gly Lys Gly Ser Pro Tyr Arg Gly Val Arg
  1                      5                      10                      15
Met Arg Lys Trp Gly Lys Trp Val Ser Glu Val Arg Glu Pro Asn Lys
      20                      25                      30
Arg Ser Arg Ile Trp Leu Gly Ser Tyr Ser Thr Pro Glu Ala Ala Ala
      35                      40                      45
Arg Ala Tyr Asp Thr Ala Val Phe Tyr Leu Arg Gly Pro Ser Ala Thr
      50                      55                      60
Leu Asn Phe Pro Glu Glu Ala Arg Lys Glu Gln Gln Ser Asp Leu Arg
65                      70                      75                      80
Leu Ser Gln Leu Gly Glu Leu Ser Pro Ser Ser Ile Gln Arg Arg Ala
      85                      90                      95
Ala Glu Val Gly Ala Ala Val Asp His Ala Met Gln Ala Gly Pro Val
      100                      105                      110
Pro Ala Gln Thr Leu Arg Glu Ile Asn Gln Glu Asn Asp Met Lys Asn
      115                      120                      125
Ala Leu Ser Ser Lys Leu Ser Glu Gly Asn Asn Phe Lys Ile Glu Ala
      130                      135                      140
Lys Asn Asn Met Arg Gln Gln Gly
145                      150

```

<210> 1043
 <211> 193
 <212> PRT
 <213> Pinus radiata

<400> 1043
 Met Ala Phe Ala Gly Thr Thr Gln Lys Cys Lys Ala Cys Glu Lys Thr
 1 5 10 15
 Val Tyr Leu Val Asp Gln Leu Thr Ala Asp Asn Ser Val Phe His Lys
 20 25 30
 Ser Cys Phe Arg Cys His His Cys Asn Gly Thr Leu Lys Leu Ser Asn
 35 40 45
 Tyr Ser Ser Phe Glu Gly Val Leu Tyr Cys Lys Pro His Phe Asp Gln
 50 55 60
 Leu Phe Lys Arg Thr Gly Ser Leu Asp Lys Ser Phe Glu Ala Ile Pro
 65 70 75 80
 Arg Ala Ser Arg Asn Asp Lys Met His Glu Asn Glu Asn Arg Thr Pro
 85 90 95
 Ser Arg Val Ser Ala Leu Phe Ser Gly Thr Gln Asp Lys Cys Val Ala
 100 105 110
 Cys Gly Lys Thr Val Tyr Pro Ile Glu Lys Val Ala Val Asp Gly Thr
 115 120 125
 Ser Tyr His Arg Pro Cys Phe Lys Cys Cys His Gly Gly Cys Val Ile
 130 135 140
 Ser Pro Ser Asn Tyr Val Ala His Glu Gly Arg Leu Tyr Cys Arg His
 145 150 155 160
 His Ser Ser Gln Leu Phe Arg Glu Lys Gly Asn Phe Ser Gln Leu Ser
 165 170 175
 Lys Ala Thr Pro Thr Lys Gly Val Thr Glu Asn Ser Asp Thr Asp Asp
 180 185 190
 Lys

<210> 1044
 <211> 121
 <212> PRT
 <213> Pinus radiata

<400> 1044
 Met Val Lys Pro Leu Pro Lys Gln Ser Ser Pro Ser Gly Ser Glu Asn
 1 5 10 15
 Cys Gln Ile Lys Ser Arg Gln Phe Lys Gly Ile Arg Leu Arg Lys Trp
 20 25 30
 Gly Lys Trp Val Ser Glu Ile Arg Met Pro Asn Ser Arg Ala Lys Ile
 35 40 45
 Trp Leu Gly Ser Tyr Asp Ser Pro Glu Lys Ala Ala Arg Ala Tyr Asp
 50 55 60
 Phe Ala Leu Tyr Cys Leu Arg Gly Ser Lys Ala Thr Phe Asn Phe Pro
 65 70 75 80
 Asp Ser Pro Pro Glu Ile Pro Cys Ala Ser Asp Leu Ser Pro Pro Gln
 85 90 95
 Ile Gln Ala Ala Ala Ala Arg Phe Ala Thr Glu Asp Phe Arg Leu Pro
 100 105 110
 Ser Glu Glu Asp Ala Ala Ser Ser Ser
 115 120

<210> 1045
 <211> 131
 <212> PRT
 <213> Pinus radiata

<400> 1045
 Met Glu Ile Arg Leu Gln Gln Glu Asn Asp Gln Asp Ile Ala Pro Pro
 1 5 10 15
 His Glu Asp Arg Val Ser Arg Gln Phe Lys Gly Val Arg Pro Arg Lys
 20 25 30

Trp Gly Ile Trp Val Ser Glu Ile Arg Met Pro Arg Ser Arg Gln Lys
 35 40 45
 Ile Trp Leu Gly Ser Tyr Lys Lys Pro Glu Gln Ala Ala Arg Ala Tyr
 50 55 60
 Asp Ala Ala Val Tyr Cys Leu Arg Gly Ser Asn Ala Lys Phe Asn Phe
 65 70 75 80
 Pro Asn Ser Val Pro Asp Ile Pro Ser Ala Ser Ser Leu Ser Arg Gln
 85 90 95
 Gln Ile Gln Leu Ala Ala Ala Lys Tyr Ala Leu Asp Gln Ser Pro Ser
 100 105 110
 Ser Pro Pro Ser Leu Asn Asn Asn Lys Glu Glu Pro Ala Ser Pro Ser
 115 120 125
 Gln Ser Ser
 130

<210> 1046
 <211> 102
 <212> PRT
 <213> Pinus radiata

<400> 1046
 Met Thr Gln Gln Thr Thr Ser Pro Thr Val Ser Pro Ala Ala Leu Ala
 1 5 10 15
 Leu Pro Thr Ser Ala Ser Ser Thr Ser Ala Lys Ser Ala Ala Val Pro
 20 25 30
 Val Pro Ala Gln Ala Asn Pro Arg Lys Arg Pro Arg Ser Asp Leu Ser
 35 40 45
 Ala Glu Glu Lys Arg Glu Ala Arg Ala His Arg Asn Arg Ile Ala Ala
 50 55 60
 Gln Asn Ser Arg Asp Lys Arg Lys Gln Gln Phe Thr Ser Leu Glu Gln
 65 70 75 80
 Arg Val Ile Asp Leu Glu Asn Glu Asn Arg Gln Leu Arg Asp Ala Leu
 85 90 95
 Ala Thr Ser Gln Pro Asn
 100

<210> 1047
 <211> 66
 <212> PRT
 <213> Pinus radiata

<400> 1047
 Leu Leu Thr Ile Phe Glu Ala Val Tyr Val His Lys Gly Ile Val Asn
 1 5 10 15
 Ala Ala Lys Val Leu Asn Leu Thr Pro Ser Ala Ile Ser Gln Ser Ile
 20 25 30
 Gln Lys Leu Arg Val Ile Phe Pro Asp Pro Leu Phe Ile Arg Lys Gly
 35 40 45
 Gln Gly Val Thr Pro Thr Ala Phe Ala Met His Leu His Glu Tyr Ile
 50 55 60
 Ser Gln
 65

<210> 1048
 <211> 106
 <212> PRT
 <213> Pinus radiata

<400> 1048
 Met Lys Gly Pro Gln Gly Ile Ser Asn Ala Gln Asn Thr Cys Thr Lys
 1 5 10 15

Phe Arg Met Pro Thr Ser Glu Asn Leu Ile Pro Ile Arg Leu Asp Ile
 20 25 30
 Glu Ile Asp Gly Leu Arg Leu Lys Asp Ala Phe Thr Trp Asn Val Asn
 35 40 45
 Asp Pro Asp Ser Glu Ile His Leu Phe Ala Arg Arg Thr Ile Lys Asp
 50 55 60
 Leu Lys Tyr Pro Gly Ser Phe Ile Thr Pro Val Val Gln Ser Ile Gln
 65 70 75 80
 Ala Gln Leu Ala Glu Phe Arg Ser Phe Glu Gly Gln Glu Met Asn Thr
 85 90 95
 Gly Gln Lys Val Leu Pro Leu Lys Leu Pro
 100 105

<210> 1049
 <211> 134
 <212> PRT
 <213> Pinus radiata

<400> 1049
 Met Glu Gly Ser Gln Asn Gly Ser Ser Asn Ala Pro Pro Pro Phe Leu
 1 5 10 15
 Thr Lys Thr Tyr Asp Met Val Asp Asp Pro Ala Thr Asn Ala Met Val
 20 25 30
 Ser Trp Ser Pro Gly Ser Asn Ser Phe Ile Val Trp Asn Pro Thr Glu
 35 40 45
 Phe Ser Arg Val Leu Leu Pro Thr Tyr Phe Lys His Ser Asn Phe Ser
 50 55 60
 Ser Phe Val Arg Gln Leu Asn Thr Tyr Gly Phe His Lys Ile Asp Pro
 65 70 75 80
 Glu Arg Trp Glu Phe Ala Asn Glu Gly Phe Leu Arg Gly His Arg His
 85 90 95
 Leu Leu Lys Asn Ile His Arg Arg Lys Pro Val His Ser His Ser Gln
 100 105 110
 Gln Lys Gly Glu Ser Leu Ser Gly Gly Ser Cys Val Glu Ile Lys Gln
 115 120 125
 Leu Glu Asp Glu Thr Glu
 130

<210> 1050
 <211> 220
 <212> PRT
 <213> Pinus radiata

<400> 1050
 Met Val Leu Tyr Glu Leu Leu His Val Gln Gln Ile Gln Gln Ile Gln
 1 5 10 15
 Gln Gln Gln Phe Gln Leu Gln Gln Gln Gln Ile Ala Ala Ala Ala Ser
 20 25 30
 Ile His His Met Gly Arg Asn Pro Leu Gly Pro Arg Asp Gln Pro Met
 35 40 45
 Lys Leu His Gly Ser Ser Leu Ser Lys Pro Ala Lys Leu Tyr Arg Gly
 50 55 60
 Val Arg Gln Arg His Trp Gly Lys Trp Val Ala Glu Ile Arg Leu Pro
 65 70 75 80
 Arg Asn Arg Thr Arg Leu Trp Leu Gly Thr Phe Asp Thr Ala Glu Glu
 85 90 95
 Ala Ala Met Ala Tyr Asp Lys Ala Ala Tyr Arg Leu Arg Gly Asp Tyr
 100 105 110
 Ala Arg Leu Asn Phe Pro His Leu Lys His His Leu Glu Ala Asn Ser
 115 120 125
 Phe Ala Pro Trp Thr Gly Asn Ser Val Leu Pro Ser Ser Val Asp Ala

130		135		140											
Lys	Leu	Gln	Ala	Ile	Cys	Gln	Ser	Leu	Lys	Gln	Pro	Leu	Glu	Ser	Met
145		150		155		160									
Ser	Lys	Thr	Glu	Glu	Ser	Glu	Glu	Ile	Ser	Cys	Ala	Tyr	Glu	Asn	Ser
		165		170		175									
Gly	Ser	Leu	Gly	Ser	Val	Arg	Asp	Glu	Asp	Ala	Lys	Lys	Asn	Asp	Val
		180		185		190									
Val	Ser	Val	Lys	Ser	Glu	Thr	Cys	Asp	Ser	Asp	Ser	Ser	Asp	Asp	Ser
		195		200		205									
Thr	Ile	Thr	Ala	Leu	Asn	Ser	Ser	Gly	Asp	Gln	Asn				
210		215		220											

<210> 1051

<211> 219

<212> PRT

<213> Pinus radiata

<400> 1051															
Arg	Ile	Glu	Ala	Pro	Gly	Arg	Arg	Thr	Asn	Pro	Ala	Ala	Val	Thr	Trp
1		5		10		15									
Ala	Ala	Ala	His	Phe	Ser	Val	Lys	Glu	Gln	Asp	Arg	Phe	Leu	Pro	Ile
		20		25		30									
Ala	Asn	Val	Gly	Arg	Ile	Met	Lys	Lys	Ala	Leu	Pro	Ala	Asn	Gly	Lys
		35		40		45									
Val	Ser	Lys	Asp	Ala	Lys	Glu	Thr	Val	Gln	Glu	Cys	Val	Ser	Glu	Phe
		50		55		60									
Ile	Ser	Phe	Ile	Thr	Gly	Glu	Ala	Ser	Asp	Lys	Cys	Gln	Arg	Glu	Lys
65		70		75		80									
Arg	Lys	Thr	Ile	Asn	Gly	Asp	Asp	Leu	Leu	Trp	Ala	Met	Thr	Thr	Leu
		85		90		95									
Gly	Phe	Glu	Asp	Tyr	Val	Glu	Pro	Leu	Lys	Ile	Tyr	Leu	His	Lys	Tyr
		100		105		110									
Arg	Glu	Met	Glu	Gly	Glu	Lys	Val	Ser	Met	Ala	Lys	Gln	Gly	Asp	Pro
		115		120		125									
Thr	Pro	Ser	Lys	Glu	Gly	Asn	Asn	Ala	Ile	Asn	Gly	Ser	Ser	Ile	Glu
		130		135		140									
Asn	Pro	Asn	Ala	Asn	Ala	Tyr	Ser	Gly	Leu	Asn	Pro	Gly	Gly	Tyr	Asn
145		150		155		160									
Arg	Val	Gln	Ser	Gln	Ser	Leu	Pro	His	Met	Gln	Gln	Ala	Ala	Tyr	Gly
		165		170		175									
Gln	Pro	Pro	Gly	Gly	Met	Val	Tyr	Gly	His	His	Gly	His	Ile	Met	Gly
		180		185		190									
Ala	Tyr	Asn	Met	Thr	Ala	Pro	Asn	Ser	Ser	Gly	Gly	Asn	Ser	Ser	Gly
		195		200		205									
Gln	Gln	Gln	Gln	Gln	Ala	Pro	Arg	Gly	Gln	Trp					
210		215													

<210> 1052

<211> 100

<212> PRT

<213> Pinus radiata

<400> 1052															
Gly	Cys	Thr	Thr	Val	Val	Glu	Thr	Leu	Ala	Lys	Trp	Gln	Glu	Leu	Asn
1		5		10		15									
Ser	Gln	Val	Glu	Ser	Ser	Lys	Asp	Gly	Ala	Lys	Arg	Leu	Arg	Lys	Ala
		20		25		30									
Pro	Ala	Lys	Gly	Ser	Lys	Lys	Gly	Cys	Met	Lys	Gly	Lys	Gly	Gly	Pro
		35		40		45									
Asp	Asn	Gly	Arg	Cys	Asn	Tyr	Arg	Gly	Val	Arg	Gln	Arg	Thr	Trp	Gly
		50		55		60									

Lys Trp Val Ala Glu Ile Arg Glu Pro Asn Arg Gly Ser Arg Leu Trp
 65 70 75 80
 Leu Gly Thr Phe Ser Ser Ala Glu Glu Ala Ala Arg Ala Tyr Asp Gln
 85 90 95
 Ala Ala Arg Val
 100

<210> 1053
 <211> 117
 <212> PRT
 <213> Pinus radiata

<400> 1053
 Met Glu Ile Val Gly Lys Ala Lys Glu Asp Val Ser Leu Pro Lys Ala
 1 5 10 15
 Thr Met Thr Lys Ile Ile Lys Glu Met Leu Pro Ala His Val Arg Val
 20 25 30
 Thr Arg Asp Ala Gln Asp Leu Leu Val Glu Cys Cys Val Glu Phe Ile
 35 40 45
 Asn Leu Ile Ser Ser Glu Ser Asn Asp Ile Cys Tyr Lys Glu Glu Lys
 50 55 60
 Arg Thr Ile Ala Pro Glu His Val Leu Glu Ser Leu Lys Ile Leu Gly
 65 70 75 80
 Phe Gly Ser Tyr Ile Arg Glu Val Lys Ala Ala Tyr Glu Gln His Arg
 85 90 95
 Ile Glu Asn Trp Asp Cys Pro Arg Ala Gly Thr Arg Trp Ser Lys Asn
 100 105 110
 Arg Leu Glu Met Thr
 115

<210> 1054
 <211> 161
 <212> PRT
 <213> Pinus radiata

<400> 1054
 Asn Ile Asn Gly Val Ala Gly Gly Val Ala Lys Glu Lys Lys Val Asn
 1 5 10 15
 Phe Pro Trp Cys Ala Leu Glu Lys Gln Val Gly Thr Ser Ser Phe Asp
 20 25 30
 Pro Asn Leu Ala Ser Ser Lys Gln Ala Met Asp Ser Leu Ile Met Gln
 35 40 45
 Gln Leu Pro Thr Phe Leu Gln Tyr Cys Lys Asp Leu Glu Glu Gly Arg
 50 55 60
 Gln Ser Trp Phe Met His Lys Lys Glu Ala Thr Trp Arg Leu Ser Arg
 65 70 75 80
 Leu Glu Gln Gln Leu Glu Ser Glu Lys Ala Arg Lys Arg Arg Glu Lys
 85 90 95
 Ile Glu Glu Val Gly Ser Lys Ile Arg Ala Leu Arg Glu Glu Ile
 100 105 110
 Thr Tyr Leu Asp Lys Leu Glu Thr Glu Cys Arg Glu Gln Leu Ser Ser
 115 120 125
 Leu Gln Arg Asp Ala Glu Met Lys Glu Ala Lys Met Met Glu Leu Trp
 130 135 140
 Ala Thr Lys His Leu Gln Leu Thr Lys Phe Val Asp Ser Ala Leu Ser
 145 150 155 160
 Val

<210> 1055
 <211> 396

<212> PRT

<213> Pinus radiata

<400> 1055

```

Met Ala Arg Glu Thr Asn Ser Phe Ala Leu Leu Gly Gly Asp Asp Asp
 1           5           10           15
Gln Gly Asp Asp Asp Leu Met Ala Leu Ile Asn Ser Ala Ala Thr Leu
          20           25           30
Lys Pro Glu Lys Lys Pro Lys Thr Thr Ala Lys Lys Asn Gly Gln Gln
          35           40           45
Gln Pro Pro Pro Pro Gln Ser Gln Pro Ala Lys Leu Pro Ser Lys Pro
          50           55           60
Leu Pro Pro Ala Glu Ala Val Arg Ala Asp Arg Gly Arg Gly Arg Gly
65           70           75           80
Gly Arg Gly Arg Gly Gly Gly Arg Gly Ser Arg Phe Glu Gly Gly Glu
          85           90           95
Tyr Asn Thr Glu Ser Asn Gly Tyr Gly Gly Gly Gly Gly Phe Gly Gly
          100          105          110
Gly Arg Gly Trp Gly Arg Asp Glu Asp Ser Gly Asn Arg Gly Trp Gly
          115          120          125
Arg Glu Glu Asp Thr Gly Gly Arg Gly Trp Gly Arg Ser Asn Gly Glu
          130          135          140
Glu Asp Thr Gly Gly Arg Gly Trp Ser Arg Ser Asn Gly Glu Asp Asp
145          150          155          160
Ala Ala Ala Gly Gly Gln Ser Arg Gly Arg Gly Arg Gly Arg Gly
          165          170          175
Arg Gly Arg Gly Phe Gly Gly Arg Gly Ser Gly Arg Phe Gly Gly Gly
          180          185          190
Gly Asp Ser Tyr Gly Tyr Asp Ala Asn Gly Gln Asp Arg Pro Pro Arg
          195          200          205
Gln Gln Phe Glu Asp Thr Asn Thr Phe Thr Gly Thr Asp Asn Trp Asp
          210          215          220
Thr Pro Glu Val Ser Val Val Asp Glu Ala Lys Asn Val Glu Pro Glu
225          230          235          240
Gln Lys Lys Pro Glu Glu Glu Ala Thr Pro Gly Val Thr Ser Glu Asn
          245          250          255
Lys Asp Asn Lys Glu Glu Glu Asp Asn Glu Met Thr Leu Asp Glu Tyr
          260          265          270
Glu Lys Leu Leu Asn Glu Lys Arg Lys Thr Leu Glu Ala Leu Lys Asn
          275          280          285
Ala Glu Arg Lys Val Ile Leu Asp Arg Asp Phe Glu Lys Met Gln Leu
          290          295          300
Val Asp Lys Lys Asn Asp Gly Ile Phe Ile Lys Leu Asn Ser Glu Lys
305          310          315          320
Glu Arg Gln Arg Lys Lys Glu Thr Leu Glu Lys Glu Glu Arg Ala Arg
          325          330          335
Lys Ser Val Ser Ile Asn Glu Phe Leu Lys Pro Ala Asp Gly Glu Arg
          340          345          350
Tyr Phe Thr Pro Ser Gly Thr Arg Gly Arg Gly Arg Gly Arg Gly Arg
          355          360          365
Gly Arg Gly Asp Gly Val Ser Thr Arg Gly Gly Phe Gly Gly Arg Tyr
          370          375          380
Ser Asp Ala Asp Gln Val Ala Ala Pro Cys Ile Glu
385          390          395

```

<210> 1056

<211> 120

<212> PRT

<213> Pinus radiata

<400> 1056

```

Thr Trp Ala Gln Glu Glu Lys Ser Pro Arg Ala Ile Gly Gly Glu
 1          5          10          15
Lys Gly Gly Arg Gly Leu Arg Gln Phe Ser Met Lys Val Cys Gln Lys
          20          25          30
Val Glu Ser Lys Gly Arg Thr Thr Tyr Asn Glu Val Ala Asp Glu Leu
          35          40          45
Val Ala Glu Tyr Ala Asn Pro Asn Ser Ala Leu Ile Ser Pro Asp Gln
          50          55          60
Gln Gln Tyr Asp Glu Lys Asn Ile Arg Arg Arg Val Tyr Asp Ala Leu
65          70          75          80
Asn Val Leu Met Ala Met Asp Ile Ile Ser Lys Asp Lys Lys Glu Ile
          85          90          95
Gln Trp Lys Gly Leu Pro Ser Thr Ser Pro Asn Asp Leu Glu Asp Leu
          100          105          110
Lys Ala Lys Arg Met Gly Leu Arg
          115          120

```

<210> 1057
 <211> 78
 <212> PRT
 <213> Pinus radiata

```

<400> 1057
Pro Met Lys Leu Tyr Arg Gly Val Arg Gln Arg His Trp Gly Lys Trp
 1          5          10          15
Val Ala Glu Ile Arg Leu Pro Arg Asn Arg Thr Arg Leu Trp Leu Gly
          20          25          30
Thr Phe Asp Thr Ala Glu Asp Ala Ala Leu Ala Tyr Asp His Glu Ala
          35          40          45
Tyr Lys Leu Arg Gly Glu Asn Ala Arg Leu Asn Phe Pro His Leu Phe
          50          55          60
Leu Asn Lys Gly Ser Thr Ser Pro Lys Ala Cys Ser Val Ala
65          70          75

```

<210> 1058
 <211> 171
 <212> PRT
 <213> Pinus radiata

```

<400> 1058
Ser Phe Ser Cys Arg Ile Arg His Gln Thr Glu Pro Thr Leu Ile Leu
 1          5          10          15
Ile Asp Thr Ala Gly Cys Asp Met Glu Glu Lys Lys Asp Asp Glu Asp
          20          25          30
Ser Thr Met Asn Glu Gly Glu Ala Thr Val Thr Leu Met His Ala Lys
          35          40          45
Lys Leu Leu Glu Ser Gly Val Asn Pro Ser Asp Ile Gly Ile Ile Thr
          50          55          60
Pro Tyr Ala Ala Gln Val Gly Leu Leu Lys Ile Met Arg Ser Lys Glu
65          70          75          80
Met Lys Leu Lys Asp Leu Glu Ile Ser Thr Val Asp Gly Phe Gln Gly
          85          90          95
Arg Glu Lys Glu Ala Ile Val Ile Ser Met Val Arg Ser Asn Ala Lys
          100          105          110
His Glu Val Gly Phe Leu Asn Asp Arg Arg Arg Met Asn Val Ala Val
          115          120          125
Thr Arg Ala Arg Arg Gln Cys Cys Ile Ile Cys Asp Thr Glu Thr Val
          130          135          140
Ser Ser Asp Lys Phe Leu Lys Arg Leu Val Glu Tyr Phe Glu Glu His
145          150          155          160
Ala Glu Tyr Leu Ser Ala Ser Glu Tyr Leu Thr

```

165

170

<210> 1059
 <211> 94
 <212> PRT
 <213> Pinus radiata

<400> 1059
 Glu Lys Cys Ser Asp Gln Val Ser Gly Ser Thr Ser Ser Cys Arg Ile
 1 5 10 15
 Arg His Glu Leu Gly Tyr Ser Arg Ser Ala Lys Arg Cys Lys Glu Lys
 20 25 30
 Trp Glu Asn Ile Asn Lys Tyr Phe Arg Lys Ala Lys Glu Ser Asn Lys
 35 40 45
 Lys Arg Pro Glu Asn Ala Lys Thr Cys Pro Tyr Phe His Gln Leu Asp
 50 55 60
 Ala Leu Tyr Lys Lys Arg Asn Leu Gly Asn Arg His Asn Lys Ile Met
 65 70 75 80
 Val Leu Ser Ile Phe Ser Val Ala Ser Thr Gly Leu Phe Met
 85 90

<210> 1060
 <211> 174
 <212> PRT
 <213> Pinus radiata

<400> 1060
 Met Ala Pro Ser Asn Asn Arg Arg Asp Asp Asn Gly Ala Arg Gly Val
 1 5 10 15
 His Phe Arg Gly Val Arg Lys Arg Pro Trp Gly Arg Tyr Ala Ala Glu
 20 25 30
 Ile Arg Asp Pro Trp Lys Lys Val Arg Leu Trp Leu Gly Thr Phe Asp
 35 40 45
 Thr Ala Glu Glu Ala Ala Arg Ala Tyr Asp Thr Ala Ala Ile Ser Leu
 50 55 60
 Arg Gly Pro Lys Ala Lys Thr Asn Phe Ala Tyr Ser Ser Pro Ser Ser
 65 70 75 80
 Ser Ser Ser Leu His Asn Asn Gln Ser Ser Ser Gln Asn Ser Ser Thr
 85 90 95
 Val Glu Ser Trp Pro Ser Ala Ala Pro Val Thr Arg Ser Gly Asp Leu
 100 105 110
 Glu Leu Pro Ala Ser Phe Leu Pro Arg Leu Gly Val Ser Thr Gly Arg
 115 120 125
 Arg Val Leu Asn Gly Gly Asn Pro Arg Ser Gly Arg Arg Arg Ser Leu
 130 135 140
 Ser Glu Lys Asn Ser Gly Arg Lys Ala Glu Gly Ala Glu Ala Arg Thr
 145 150 155 160
 Thr Leu Ser Asp Ser Asp Ser Ser Ser Ser Ala Val Leu Asp
 165 170

<210> 1061
 <211> 121
 <212> PRT
 <213> Pinus radiata

<400> 1061
 Met Gly Pro Leu Met Gly Ser Pro Leu Gly Gly Gly Leu Gly Leu Ser
 1 5 10 15
 Pro Arg Met Gly Gly Gly Ile Gly Asn Gly Leu Gln Gly Gly Leu Gly
 20 25 30
 Val Gly Leu Ala Gly Leu Gly Ala Thr Ala Leu Thr Ile Gly Ala Ala

```

      35      40      45
Ser Pro Ala Asn Gln Leu Ser Ser Asp Gly Met Gly Asn Ser His Gly
  50      55      60
Asp Asn Ser Thr Val Ser Pro Ile Pro Tyr Gly Leu Asp Val Ser Val
  65      70      75      80
Arg Gly Arg Lys Arg Gly Gly Pro Val Glu Lys Val Val Glu Arg Arg
      85      90      95
Gln Arg Arg Met Ile Lys Asn Arg Glu Ser Ala Ala Arg Ser Arg Ala
      100      105      110
Arg Lys Gln Ala Tyr Thr Val Asn Trp
      115      120

```

<210> 1062
 <211> 145
 <212> PRT
 <213> Pinus radiata

```

      <400> 1062
Glu Thr Arg Gly Gly Ser Ser Gly Asp Phe Leu Pro Pro Pro Pro Thr
  1      5      10      15
Thr Lys Cys Ser Glu Glu Leu Gln Asn Lys Ile Thr Lys Tyr Ile Ala
      20      25      30
Leu Lys Ser Ala Gly Arg Ser Phe Asn Lys Glu Leu Arg Asn Ser Lys
      35      40      45
Gly Tyr Arg Asn Pro Asp Phe Leu Gln Arg Ala Val Lys Tyr Gln Gly
      50      55      60
Ile Asp Gln Ile Gly Ser Cys Phe Lys Lys Glu Ile Phe Asp Pro His
  65      70      75      80
Gly Tyr Asp Pro Ser Asp Tyr Tyr Asp Ala Leu Ala Leu Glu Leu Lys
      85      90      95
Arg Glu Phe Glu Arg Arg Glu Gln Glu Lys Gln Lys Asn Gln Arg Val
      100      105      110
Asp Phe Val His Gly Ala Val Gln Thr Thr Ser Val Gln Ser Val Ser
      115      120      125
Lys Pro Ile Val Gln Val Met Gly Gly Gln Lys Val Pro Val Val Gly
      130      135      140
Val
145

```

<210> 1063
 <211> 236
 <212> PRT
 <213> Pinus radiata

```

      <400> 1063
Met Ser Ser Pro Gln Ser Asn Lys Trp Leu Ser Tyr Phe Asp Glu Pro
  1      5      10      15
Leu Leu Asp Asp Val Gly Val Gly Gln Pro Ala Asn Pro Phe Phe Trp
      20      25      30
Cys Gly Gln Gly Ile Asn Asp Gln Pro Asp Val Ser Val Glu Ile Asp
      35      40      45
Gly Pro Asn Lys Asp Met Asp Glu Gln Asp Lys Leu Cys Pro Arg Lys
      50      55      60
Arg Ser Arg Glu Glu Ser Ser Gly Gly Pro Gly Ser Lys Ala Cys Arg
  65      70      75      80
Glu Lys Met Arg Arg Asp Arg Leu Asn Asp Arg Phe Met Glu Leu Ser
      85      90      95
Ser Val Leu Glu Pro Gly Arg Pro Pro Lys Thr Ala Asp Lys Ala Thr
      100      105      110
Ile Leu Ser Asp Ala Ala Arg Val Met Thr Gln Leu Arg Thr Glu Ala
      115      120      125

```

Gln Asn Leu Lys Ala Glu Asn Glu Arg Leu Gln Glu Ala Ile Lys Asp
 130 135 140
 Leu Lys Ala Glu Lys Asn Glu Leu Arg Asp Glu Lys Leu Arg Met Lys
 145 150 155 160
 Ala Glu Lys Glu Lys Leu Asp Gln Gln Val Lys Ala Met Ala Leu Pro
 165 170 175
 Thr Gly Phe Val Pro His Pro Ala Ala Phe His Ala Ala Ala Phe
 180 185 190
 Ala Ala Gln Ser Gln Ala Ala Ala Asn Lys Thr Met Pro Val Pro Gly
 195 200 205
 Tyr Pro Gly Met Ala Met Trp Gln Trp Met Pro Pro Ala Val Val Asp
 210 215 220
 Thr Ser Gln Asp His Val Leu Arg Pro Pro Val Ala
 225 230 235

<210> 1064
 <211> 145
 <212> PRT
 <213> Pinus radiata

<400> 1064
 Met Gly Ser Arg Thr Met Leu Ser Ser Asn Gly Gly Arg Thr Pro Gln
 1 5 10 15
 Phe Gln Pro Leu Val Arg Gln Asn Ser Leu Tyr Asn Leu Thr Leu Glu
 20 25 30
 Glu Val Gln Asn Gln Leu Gly Asp Ala Ser Lys Pro Leu Ser Ser Met
 35 40 45
 Asn Met Asp Glu Leu Leu Lys Asn Ile Trp Thr Gln Glu Glu Ser Gln
 50 55 60
 Ala Ile Ser Met Ala Ile Gly Asn Gly Pro Met Asn Gly Val Pro Pro
 65 70 75 80
 Asn Ser Ala Pro Ala Ser Gly Gly Leu Gln Arg Gln Gly Ser Leu Thr
 85 90 95
 Ile Pro Arg Thr Leu Ser Arg Lys Thr Val Asp Glu Val Trp Arg Asp
 100 105 110
 Ile Gln Gln Ser Gln Gly Lys Ser Asn Glu Glu Lys Lys Pro Gln Gln
 115 120 125
 Arg Gln Ser Thr Phe Gly Glu Met Thr Leu Glu Asp Phe Leu Val Lys
 130 135 140
 Ala
 145

<210> 1065
 <211> 171
 <212> PRT
 <213> Pinus radiata

<400> 1065
 Met Ala Ser Gly Asn Val Asp Pro Asp Gln Trp Glu Phe Ala Asn Glu
 1 5 10 15
 Asp Phe Leu Arg Gly Gln Arg Asn Leu Leu Lys Asn Ile His Arg Arg
 20 25 30
 Lys Pro Met His Ser His Ser Gln Asn Pro Gln Gln Gly Val Cys Asn
 35 40 45
 Asp Ala Ile Lys Tyr Glu Leu Glu Glu Glu Ile Gln Arg Leu Lys Arg
 50 55 60
 Asp Lys Gly Leu Leu Met Met Glu Leu Val Arg Ile Arg Gln Gln His
 65 70 75 80
 Gln Gly Thr Glu Met His Met Gln Thr Leu Glu Glu Arg Leu Gln Ala
 85 90 95
 Met Glu His Arg Gln Gln Gln Met Met Ala Phe Leu Ala Lys Ala Val

```

      100      105      110
Gln Lys Pro Gly Phe Val Ala Gln Leu Val Gln Gln Ser Glu Asn Asn
      115      120      125
Lys Leu Leu Glu Ala Ala Asn Lys Lys Arg Arg Leu Pro Lys Gln Glu
      130      135      140
Asn Cys Ser Glu Ala Gly Glu Thr Glu Leu Thr Asp Ser Gln Ile Val
145      150      155      160
Lys Tyr Gln Pro Ala Ser Gly Asp Glu Cys Ser
      165      170

```

```

<210> 1066
<211> 112
<212> PRT
<213> Pinus radiata

```

```

      <400> 1066
Val Ala Ala Ala Ser Ala Ser Ala Ser Gly Thr Ala Val Ala Ala Ser
 1      5      10      15
Leu Pro Val Asn Gly Ala Ala Gly Val Arg Ser Ser Val Asp Ser Glu
      20      25      30
His Ser Asp Ile Glu Ala Ser Phe Lys Glu Ala Glu Cys Ser Gln Ala
      35      40      45
Ile Val Glu Arg Arg Pro Arg Lys Arg Gly Arg Lys Pro Ala Asn Gly
      50      55      60
Arg Glu Glu Pro Leu Asn His Val Glu Ala Glu Arg Gln Arg Arg Glu
      65      70      75      80
Lys Leu Asn Gln Arg Phe Tyr Ala Leu Arg Ala Val Val Pro Asn Val
      85      90      95
Ser Lys Met Asp Lys Ala Ser Leu Leu Gly Asp Ala Ile Ser Tyr Ile
      100      105      110

```

```

<210> 1067
<211> 73
<212> PRT
<213> Pinus radiata

```

```

      <400> 1067
Leu Tyr Ala Glu Glu Ser Ser Thr Val Thr His Leu Gln Tyr Gln Gln
 1      5      10      15
Ser Ile Leu Glu Asn Asp Leu Arg Ser Lys Leu Lys Asp Asn Leu Gln
      20      25      30
Gln Pro Gln Asn Ser Gly Lys Lys Arg Arg Tyr Arg Gly Val Arg Gln
      35      40      45
Arg Pro Trp Gly Lys Trp Ala Ala Glu Ile Arg Asp Pro Lys Lys Ala
      50      55      60
Ala Arg Val Trp Leu Gly Thr Phe Asp
      65      70

```

```

<210> 1068
<211> 203
<212> PRT
<213> Pinus radiata

```

```

      <400> 1068
Asn Met Ala Lys His Thr Val Cys Ala Ser Phe Leu Asn Glu Gly Asp
 1      5      10      15
Phe Ile Cys Pro Pro Tyr Glu Asp Gly Ile Gly Leu Glu Trp Leu Ser
      20      25      30
Asp Phe Val Glu Asp Ser Phe Ala Ala Thr Gly Ser Ser Asn Ser Gly
      35      40      45
Ser Leu Ala Asp Leu Ser Lys Asp Lys Ile Asp Asp Asn Arg Glu Lys

```

50						55						60					
Lys	Lys	Gln	Asn	Pro	Thr	Asp	Glu	Ala	Ile	Ile	Pro	Glu	Ile	Pro	Pro		
65						70					75				80		
Ile	Lys	Glu	Thr	Pro	Arg	Ser	Gln	Arg	Ala	Val	Pro	Gly	Arg	Ala	Arg		
				85					90					95			
Ser	Lys	Arg	Arg	Arg	Ser	Ser	Gly	Ala	Pro	Ile	Arg	Gly	Trp	Ser	Thr		
			100					105					110				
Ser	Glu	Asp	Tyr	Ala	Leu	Gln	Asn	Glu	Gly	Gly	Met	Lys	Thr	Val	Thr		
		115					120					125					
Gly	Ala	Asp	Ala	Ile	Asn	His	Tyr	Gln	Ser	Ser	Ala	Pro	Gln	Gln	Gln		
	130					135					140						
Pro	Arg	Arg	Cys	Thr	His	Cys	Leu	Ser	Gln	Arg	Thr	Pro	Gln	Trp	Arg		
145					150					155					160		
Leu	Gly	Pro	Leu	Gly	Pro	Lys	Thr	Leu	Cys	Asn	Ala	Cys	Gly	Val	Arg		
			165						170					175			
Phe	Lys	Ser	Gly	Arg	Leu	Phe	Pro	Glu	Tyr	Arg	Pro	Ala	Lys	Ser	Pro		
			180					185					190				
Thr	Phe	Ile	Arg	Tyr	Ile	His	Ser	Asn	Ser	His							
		195					200										

<210> 1069
 <211> 190
 <212> PRT
 <213> Pinus radiata

Gly	Asn	Ala	Ala	Arg	Arg	Pro	His	Asp	Val	Leu	Leu	Lys	Leu	Glu	Lys		
1				5				10					15				
Leu	Ser	Ser	Gln	Thr	Thr	Leu	Glu	Ser	Leu	Gln	Arg	Leu	Ile	Val	Gln		
			20					25					30				
Lys	Lys	Cys	Leu	Leu	Phe	Gly	Lys	Val	Gly	Ile	Arg	Ile	Asp	Gly			
		35					40					45					
Lys	Lys	Thr	Ala	Asn	Thr	Glu	Lys	Val	Asn	Glu	Arg	Asn	Thr	Ile	Pro		
	50					55				60							
Arg	Ile	Ile	Phe	Gly	Ala	Leu	Thr	Phe	Thr	Arg	Asn	Arg	Pro	His	Ala		
65				70					75					80			
Leu	Ser	Lys	Asn	Gly	Ser	Ile	Ala	Asp	Thr	Arg	Arg	Asn	Ile	Cys	Gly		
			85					90					95				
Ala	Pro	Gln	Glu	Asp	Gly	Thr	Ile	Cys	Thr	Ala	Ile	Pro	Leu	Lys	Ser		
			100					105					110				
Arg	Lys	Arg	Cys	Pro	Asp	His	Lys	Gly	Gln	Lys	Gly	Gln	Lys	Glu	Lys		
		115					120					125					
Asn	Leu	Ser	Lys	Ile	Asn	Ile	Ser	Ala	Asn	Val	Glu	Ser	Arg	Asn	Gln		
	130					135					140						
Gly	Val	Gly	Glu	His	Glu	Asn	Glu	Tyr	Arg	Tyr	Cys	Gly	Val	Leu	Leu		
145					150					155					160		
Lys	Asp	Gly	Ser	Thr	Cys	Lys	Ile	Ile	Pro	Asp	Lys	Gly	Arg	Lys	Arg		
			165						170					175			
Cys	Asn	Ile	His	Lys	Gly	Met	Arg	Ile	Pro	Gly	Gln	Ala	Lys				
		180						185					190				

<210> 1070
 <211> 81
 <212> PRT
 <213> Pinus radiata

Met	Ala	Thr	Ser	Asn	Pro	Phe	Asp	Leu	Leu	Gly	Asp	Asp	Asp	Asn	Gly		
1				5				10						15			
Asp	Val	Ser	Gln	Leu	Val	Phe	Val	Pro	Gln	Glu	Lys	Pro	Thr	Val	Lys		
			20					25					30				


```
<210> 1071
<211> 154
<212> PRT
<213> Pinus radiata
```

```
<210> 1072
<211> 63
<212> PRT
<213> Pinus radiata
```

```
<210> 1073
<211> 331
<212> PRT
<213> Pinus radiata
```

353

```

Leu Val Thr Leu Pro Arg Ile Gly Glu Arg Val Phe Tyr Phe Pro Gln
   35           40           45
Gly His Met Glu Gln Val Glu Ala Ser Thr Asn Gln Gly Ala Asp Gln
   50           55           60
His Met Pro Leu Phe Asn Leu Pro Tyr Lys Ile Leu Cys Arg Val Ile
   65           70           75           80
Asn Val Gln Leu Lys Ala Glu Pro Asp Thr Asp Glu Val Phe Ser Gln
           85           90           95
Ile Thr Leu Leu Pro Glu Ala Glu Gln Asp Glu Ser Ser Val Glu Lys
           100           105           110
Glu Pro Leu Thr Pro Leu Pro Pro Lys Pro Leu Val Tyr Ser Phe Cys
           115           120           125
Lys Thr Leu Thr Ala Ser Asp Thr Ser Thr His Gly Gly Phe Ser Val
           130           135           140
Leu Arg Arg His Ala Asp Glu Cys Leu Pro Pro Leu Asp Met Ser Gln
           145           150           155           160
Gln Pro Pro Ser Gln Asp Leu Val Ala Lys Asp Leu His Gly Val Glu
           165           170           175
Trp Arg Phe Arg His Ile Phe Arg Gly Gln Pro Arg Arg His Leu Leu
           180           185           190
Thr Thr Gly Trp Ser Val Phe Val Ser Ser Lys Arg Leu Val Ala Gly
           195           200           205
Asp Ala Phe Ile Phe Leu Arg Gly Glu Asn Gly Glu Leu Arg Val Gly
           210           215           220
Val Arg Arg Ala Met Arg Gln Gln Asn Asn Val Pro Ser Ser Val Ile
           225           230           235           240
Ser Ser His Ser Met His Leu Gly Val Ile Ala Thr Ala Ser His Ala
           245           250           255
Val Thr Thr Lys Thr Met Phe Ser Val Tyr Tyr Lys Pro Arg Thr Ser
           260           265           270
Pro Ser Glu Phe Ile Ile Pro Tyr Asp Gln Tyr Met Glu Ser Met Lys
           275           280           285
Ile Asn Phe Ser Val Gly Met Arg Phe Lys Met Lys Phe Glu Gly Glu
           290           295           300
Glu Val Pro Glu Gln Arg Phe Thr Gly Thr Ile Val Gly Ile Ser Asp
           305           310           315           320
Ala Asp Pro Val Asn Trp Pro Asn Ser Lys Trp
           325           330

```

```

<210> 1074
<211> 113
<212> PRT
<213> Pinus radiata

```

```

<400> 1074
Met Thr Gln Ala Thr Asn Tyr Thr Ala Gly Thr Ile Arg Asp Asp Gln
   1           5           10           15
Glu Glu Gln Cys Val Arg Arg Gly Pro Trp Thr Val Asp Glu Asp Met
           20           25           30
Ser Leu Ile Arg Cys Val Thr Thr Arg Gly Glu Gly Arg Trp Asn Thr
           35           40           45
Val Ala Lys Phe Ala Gly Leu Lys Arg Thr Gly Lys Ser Cys Arg Leu
           50           55           60
Arg Trp Leu Asn Tyr Leu Arg Pro Asp Val Lys Arg Gly Asn Ile Thr
           65           70           75           80
Pro Glu Glu Gln Leu Leu Ile Leu Glu Leu His Arg Leu Trp Gly Asn
           85           90           95
Arg Trp Ser Lys Ile Ala Arg Gln Leu Pro Gly Arg Thr Asp Asn Glu
           100           105           110
Ile

```

<210> 1075
 <211> 44
 <212> PRT
 <213> Pinus radiata

<400> 1075
 Met Ala Glu Asn Tyr Gly Ser Pro Asp Ser Ser Pro Arg Ser Glu Asn
 1 5 10 15
 Glu Ser Gly Gly Gly His Met Gly Gly Ser Asp Phe Ser Val Lys Glu
 20 25 30
 Gln Asp Arg Phe Leu Pro Ile Ala Asn Val Gly Arg
 35 40

<210> 1076
 <211> 282
 <212> PRT
 <213> Pinus radiata

<400> 1076
 Met Pro Met Leu Ala Glu Thr Tyr Arg Asp Ser Phe Glu Thr Thr Ser
 1 5 10 15
 Gly Gly Ser Ser Val Asp Leu Val Gly Met Ala Leu Pro Gly Leu Ala
 20 25 30
 Pro Asn Leu Ser Ser Ala Ser Val Ser Ala Ser Ala Ser Glu Asp Ser
 35 40 45
 Ala Lys Lys Ile Arg Lys Pro Tyr Thr Ile Thr Lys Ser Arg Glu Ser
 50 55 60
 Trp Ser Glu Gln Glu His Asp Lys Phe Leu Glu Ala Leu Gln Leu Phe
 65 70 75 80
 Asp Arg Asp Trp Lys Lys Ile Glu Ala Phe Val Gly Ser Lys Thr Val
 85 90 95
 Ile Gln Ile Arg Ser His Ala Gln Lys Tyr Phe Leu Lys Val Gln Lys
 100 105 110
 Asn Gly Thr Arg Glu His Val Pro Pro Arg Pro Lys Arg Lys Ala
 115 120 125
 Ser His Pro Tyr Pro Gln Lys Ala Ser Lys Asn Val Pro Val Ser Gln
 130 135 140
 Gln Val Ser Thr Ala Phe Pro Thr Ala Ala Thr Gln Leu Asp Ser Gly
 145 150 155 160
 Tyr Tyr Pro Arg Ala Glu Ser Ser Ser Ile Leu Thr Lys Ser Gly Ser
 165 170 175
 Ser Cys Pro Thr Val Ser Ser Trp Val His His Thr Ile Pro Ser Ile
 180 185 190
 Asp Ala Ser Phe Val Glu Lys Asp Asp Gly Gly Pro Pro Gly Ile Glu
 195 200 205
 Thr Gly Asn Asn Cys Ser Ser Gly Ser Thr Glu Ser Ser Pro Pro Thr
 210 215 220
 Trp Pro Pro Cys Ser Glu Ile Pro Glu Lys Val Lys Pro Asp Phe Ser
 225 230 235 240
 Gln Val Tyr Lys Phe Ile Gly Ser Val Phe Asp Pro Ser Thr Thr Asp
 245 250 255
 His Leu Lys Lys Leu Lys Glu Trp Ile Gln Leu Ile Leu Lys Leu Cys
 260 265 270
 Cys Thr His Glu Glu Pro Phe His Asn Leu
 275 280

<210> 1077
 <211> 104
 <212> PRT
 <213> Pinus radiata

<400> 1077

```

Met Gly Arg Ser Phe Ser Cys Trp Ser Cys Ser Lys Asp Asn Gly His
 1           5           10           15
Glu Arg Leu Asn Arg Gly Ser Trp Ser Ala Glu Glu Asp Thr Ile Leu
           20           25           30
Ser Glu His Ile Lys Thr His Gly Val Gly Arg Trp Thr Ser Leu Pro
           35           40           45
Lys Lys Ala Gly Leu Lys Arg Ser Gly Lys Ser Cys Arg Leu Arg Trp
           50           55           60
Phe Asn Tyr Leu Arg Ser Asp Ile Lys His Gly Asn Ile Ser Pro Glu
65           70           75           80
Glu Glu Glu Leu Leu Ile Arg Leu His Arg Leu Leu Gly Asn Arg Trp
           85           90           95
Ser Leu Ile Ala Gly Arg Leu Pro
           100

```

<210> 1078

<211> 93

<212> PRT

<213> Pinus radiata

<400> 1078

```

Met Asp Arg Asp Lys Leu Met Lys Met Ala Gly Ala Val Arg Thr Gly
 1           5           10           15
Gly Lys Gly Thr Val Arg Arg Lys Lys Lys Ala Val His Arg Ala Thr
           20           25           30
Thr Thr Asp Asp Lys Arg Leu Gln Ser Thr Leu Lys Arg Leu Gly Val
           35           40           45
Asn Thr Ile Pro Ala Ile Glu Glu Val Asn Ile Phe Lys Asp Glu Met
50           55           60
Val Ile His Phe Ile Asn Pro Lys Val Gln Ala Ser Ile Asn Ala Asn
65           70           75           80
Thr Trp Val Val Ser Gly Ser Pro Gln Thr Lys Asn Leu
           85           90

```

<210> 1079

<211> 118

<212> PRT

<213> Pinus radiata

<400> 1079

```

Met Asp Arg Asp Lys Leu Met Lys Met Ala Gly Ala Val Arg Thr Gly
 1           5           10           15
Gly Lys Gly Thr Val Arg Arg Lys Lys Lys Ala Val His Arg Ala Thr
           20           25           30
Thr Thr Asp Asp Lys Arg Leu Gln Ser Thr Leu Lys Arg Leu Gly Val
           35           40           45
Asn Thr Ile Pro Ala Ile Glu Glu Val Asn Ile Phe Lys Asp Glu Met
50           55           60
Val Ile His Phe Ile Asn Pro Lys Val Gln Ala Ser Ile Asn Ala Asn
65           70           75           80
Thr Trp Val Val Ser Gly Ser Pro Gln Thr Lys Asn Leu Gln Asp Leu
           85           90           95
Leu Pro Gly Ile Ile Asn Gln Leu Gly Pro Asp Asn Leu Ile Asn Leu
           100           105           110
Lys Lys Ile Ala Gln Gln
           115

```

<210> 1080

<211> 191

<212> PRT
<213> Pinus radiata

<400> 1080
 Asp Asp Glu Glu Ala Ser Leu Lys Gly Lys Val Arg Trp Gly Leu
 1 5 10 15
 Asp Ser Ile Ala Ala Leu Gly Leu Lys Phe Ile Lys Arg Ala Leu Ala
 20 25 30
 Lys Lys Lys Thr Val Gly Ile Ala Gly Gly Ala Asp Arg Val Leu Leu
 35 40 45
 Ser Gly Arg Met Lys Leu Lys Pro Lys Gly Leu Met Cys Val Phe Cys
 50 55 60
 Gly Leu Leu Arg Val Arg Gly Asn Gly Ile Ile Gly Val Lys Val Phe
 65 70 75 80
 Leu Glu Lys Tyr Ala Gly Ser Ser Gln Gln Glu Ile Leu Arg Val Glu
 85 90 95
 Ile Ser Leu Ser Phe Ala Phe Gln Asn Glu Asp Arg Leu Leu Pro Ala
 100 105 110
 Ala Ser Gly Arg Gly Lys Glu Glu Ser Gln Phe Arg Ala Met Ala Cys
 115 120 125
 Met Cys Trp Ala Thr Cys Val Pro Thr Cys Cys Trp Glu Pro Cys Cys
 130 135 140
 Ile Phe Ser Ser Arg Ser Gln Ala Gly Gly Cys Leu Asn Lys Gln Glu
 145 150 155 160
 Val Asp Ala His Ile Pro Asn Tyr Pro Asn Leu Pro Pro Gln Leu Ile
 165 170 175
 Cys His Tyr Thr Met Leu Leu Cys Arg Gln Met Trp Arg Gln Met
 180 185 190

<210> 1081
<211> 86
<212> PRT
<213> Pinus radiata

<400> 1081
 Ile Asp Ser Ser Glu Lys Arg Leu Lys Gly Lys Asn Tyr Ile Asp Ile
 1 5 10 15
 Thr Thr Glu Arg Ala Ala Gln Glu Pro Gly Cys Ile Met Ala Arg Pro
 20 25 30
 Gln Arg Tyr Arg Gly Val Arg Gln Arg His Trp Gly Ser Trp Val Ser
 35 40 45
 Glu Ile Arg His Pro Leu Leu Lys Thr Arg Ile Trp Leu Gly Thr Phe
 50 55 60
 Glu Thr Ala Glu Asp Ala Ala Arg Ala Tyr Asp Glu Ala Ala Arg Met
 65 70 75 80
 Met Cys Gly Pro Arg Ala
 85

<210> 1082
<211> 119
<212> PRT
<213> Pinus radiata

<400> 1082
 Met Val Arg Ser Pro Cys Cys Asp Lys Val His Thr Asn Asn Lys Gly
 1 5 10 15
 Ala Trp Thr Lys Glu Glu Asp Glu Arg Leu Ile Ala His Ile Glu Ala
 20 25 30
 His Gly Glu Gly Ser Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu
 35 40 45
 Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro

50 55 60
 Asp Leu Lys Arg Gly Ser Phe Ser Glu Glu Glu Asp Asp Leu Ile Ile
 65 70 75 80
 Lys Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg
 85 90 95
 Leu Gln Gly Glu Arg Thr Thr Lys Ile Lys Asn Tyr Trp Asn Thr His
 100 105 110
 Met Lys Arg Lys Leu Leu Ser
 115

<210> 1083
 <211> 128
 <212> PRT
 <213> Pinus radiata

<400> 1083
 Met Gly Arg Ser Pro Cys Pro Pro Lys Glu Ala Leu Asn Arg Gly Ala
 1 5 10 15
 Trp Thr Gly Met Glu Asp Thr Ile Leu Thr Glu Tyr Ile Arg Val His
 20 25 30
 Gly Ser Gly Gly Trp Lys Asp Ile Ser Lys Arg Ala Gly Leu Lys Arg
 35 40 45
 Cys Ala Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu Arg Pro Asp
 50 55 60
 Ile Lys Arg Gly Asn Ile Ser Pro Glu Glu Glu Leu Ile Ile Arg
 65 70 75 80
 Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Met
 100 105 110
 Ser Lys Lys Pro Trp Leu Ser Met Asp Glu Ser Gln Ser Asn Thr Ser
 115 120 125

<210> 1084
 <211> 126
 <212> PRT
 <213> Pinus radiata

<400> 1084
 Glu Glu Glu Asp Glu Glu Glu Ala Gly Lys Glu Leu Glu Ala Trp Glu
 1 5 10 15
 Arg Ala Tyr Ala Asp Glu Arg Ser Trp Glu Thr Leu Gln Glu Asp Glu
 20 25 30
 Glu Gly Leu Leu Asn Phe Asp Lys Lys Gln Gln Gln Gln Gln Arg
 35 40 45
 Gln Tyr Arg Arg Arg Leu Gln Ser Ala Ala Ala Ala Ser Asn Ile
 50 55 60
 Gln Arg Gly Leu Ile Arg Tyr Leu Tyr Ile Ile Asp Phe Ser Arg
 65 70 75 80
 Ala Ala Ala Glu Lys Asp Phe Lys Pro Asn Arg Met Val Val Val Ala
 85 90 95
 Asn Cys Val Glu Ala Phe Val Arg Glu Phe Phe Asp Gln Asn Pro Leu
 100 105 110
 Ser Gln Leu Gly Ile Val Ile Ile Lys Asn Gly Val Ala His
 115 120 125

<210> 1085
 <211> 139
 <212> PRT
 <213> Pinus radiata

<400> 1085
 Arg Ala Pro Cys Cys Glu Lys Thr His Thr Asn Lys Gly Ala Trp Ser
 1 5 10 15
 Lys Asp Glu Asp Glu Ala Leu Val Ala Tyr Ile Gln Ala His Gly Glu
 20 25 30
 Gly Ser Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Gln Arg Cys Gly
 35 40 45
 Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp Leu Lys
 50 55 60
 Arg Gly Asn Phe Ser Pro Glu Glu Asp Glu Ile Ile Ile Lys Leu His
 65 70 75 80
 Ser Met Leu Gly Asn Lys Trp Ser Leu Ile Ala Ser Lys Leu Pro Gly
 85 90 95
 Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Ile Lys Arg
 100 105 110
 Lys Met Leu Glu Arg Gly Leu Asp Pro Ser Thr His Leu Pro Leu Met
 115 120 125
 Ser Asp His Gly Ser Phe Glu Ser Ser Ser Lys
 130 135

<210> 1086
 <211> 189
 <212> PRT
 <213> Pinus radiata

<400> 1086
 Lys Val Val Pro Pro Leu Asp Phe Thr Gln Gln Pro Pro Ala Gln Glu
 1 5 10 15
 Leu Thr Ala Arg Asp Leu His Asp Asn Glu Trp Lys Phe Arg His Ile
 20 25 30
 Phe Arg Gly Gln Pro Lys Arg His Leu Leu Thr Thr Gly Trp Ser Val
 35 40 45
 Phe Val Ser Ala Lys Arg Leu Ala Ala Gly Asp Ser Val Leu Phe Ile
 50 55 60
 Trp Asn Glu Lys Gly Gln Leu Leu Leu Gly Ile Arg Arg Ala Asn Arg
 65 70 75 80
 Pro Gln Ala Val Met Pro Ser Leu Val Leu Ser Ser Asp Ser Met His
 85 90 95
 Ile Gly Leu Leu Ala Ala Ala Ala His Ala Ala Ala Thr Asn Ser Arg
 100 105 110
 Phe Thr Ile Phe Tyr Asn Pro Arg Ala Ser Pro Ser Glu Phe Val Ile
 115 120 125
 Pro Leu Ala Lys Tyr Val Lys Ala Val Tyr His Thr Arg Val Ser Ile
 130 135 140
 Gly Met Arg Phe Arg Met Leu Phe Glu Thr Glu Glu Ser Ser Val Arg
 145 150 155 160
 Arg Tyr Met Gly Thr Ile Thr Gly Ile Ser Asp Leu Asp Gln Val Arg
 165 170 175
 Trp Pro Asn Ser His Trp Arg Ser Val Lys Val Gly Trp
 180 185

<210> 1087
 <211> 132
 <212> PRT
 <213> Pinus radiata

<400> 1087
 Trp Glu Phe Ala Asn Asp Cys Phe Arg Lys Gly Glu Lys Gln Leu Leu
 1 5 10 15
 Cys Glu Ile His Arg Arg Lys Ser Val Gln Gln Ser Ser Ala Ala Pro
 20 25 30

Ala Ser Arg Cys Val Ser Pro Val Asn Ser Val Glu Glu Gln Ala Leu
 35 40 45
 Ser Ser Thr Ser Ser Pro Val Ser Ser His Ala Glu Ala Ala Leu Val
 50 55 60
 Asn Cys Gly Gln Asn Ser Thr Ser Gly Leu His Gly Glu Asn Glu Lys
 65 70 75 80
 Leu Arg Lys Asp Asn Leu Leu Leu Met Ser Glu Leu Ala Gln Met Lys
 85 90 95
 Lys Gln Cys Asn Asp Leu Leu Leu Phe Leu Ser Lys Cys Val Asn Ile
 100 105 110
 Thr Pro Asp Asn Leu Ser Asn Ile Leu Ile Ala Ala Ser Gln Thr Asn
 115 120 125
 Cys Arg Asp Glu
 130

<210> 1088

<211> 214

<212> PRT

<213> Pinus radiata

<400> 1088

Gly Lys Trp Gly Val Pro Asp Asn Leu Tyr Gly Ala Gln Glu Asp Ser
 1 5 10 15
 Gly Gly Ser Ser Val Lys Gln Lys Asn Leu Lys Asp Gly Asp Gln Phe
 20 25 30
 Thr Ser Ser Asp Glu Ala Asp Ser Glu Val Asn Glu Phe Asn Ile Met
 35 40 45
 Lys Arg Ser Asn Ser Gly Val Gly Tyr Glu Asp Asn Lys Arg Ser Gly
 50 55 60
 Gly Gln Gly Asp Gly Asn Gln Tyr Arg Ser Arg His Ser Arg Ser Ile
 65 70 75 80
 Ser Met Asp Ser Ile Met Ser Lys Met His Asn Phe Ser Glu Asp Leu
 85 90 95
 Glu Gln Glu Pro Ser Gln Gly Arg Asn Val Arg His Ser His Ser Asn
 100 105 110
 Ser Met Asp Gly Ser Thr Asn Phe Asn Val Glu Phe Gly Asn Gly Glu
 115 120 125
 Phe Ser Ala Ser Glu Met Lys Lys Ile Met Ala Ser Glu Lys Leu Ala
 130 135 140
 Glu Leu Ala Thr Val Asp Pro Lys Arg Val Lys Arg Ile Leu Ala Asn
 145 150 155 160
 Arg Gln Ser Ala Ala Arg Ser Lys Glu Arg Lys Met Arg Tyr Ile Ser
 165 170 175
 Glu Leu Glu Arg Lys Val Gln Thr Leu Gln Thr Glu Ala Thr Thr Leu
 180 185 190
 Ser Ala Gln Leu Thr Leu Leu Gln Arg Asp Gln Leu Asp Trp Ala Val
 195 200 205
 Arg Thr Thr Ser Ser Ser
 210

<210> 1089

<211> 97

<212> PRT

<213> Pinus radiata

<400> 1089

Met Ala Asp Gly His Gln Phe Asn Asn Ile Leu Leu Val Gly Arg Gly
 1 5 10 15
 Gly Thr Asn Pro Gly Gln Leu Arg Ile His Ser Gly Gly Ile Val Trp
 20 25 30
 Arg Arg Gln Gly Gly Gly Lys Val Val Asp Val Ala Lys Asn Glu Val


```

          35          40          45
Lys Ser Leu Ser Trp Thr Arg Val Pro Arg Gly Tyr Gln Leu Gly Val
   50          55          60
Lys Leu Lys Ala Gly Leu Asn Ile Lys Leu Ala Gly Phe Arg Glu Gln
   65          70          75          80
Asp Val Gly Asn Leu Thr Asn Phe Met Thr Asn Thr Ile Gly Leu Ala
          85          90          95
Pro

```

```

<210> 1090
<211> 108
<212> PRT
<213> Pinus radiata

```

```

<400> 1090
Met Gly Asp His Ser Gly Gly Glu Ser Ser Pro His Ser Asp Ile Glu
 1          5          10          15
Ser Thr Gly Ile His Asn Asn Gly Ser Ser Ser Ser Gln Ser Ile
          20          25          30
Ile Arg Glu Gln Asp Arg Leu Leu Pro Ile Ala Asn Val Gly Arg Ile
          35          40          45
Met Lys Lys Thr Leu Pro Thr Asn Ala Lys Ile Ser Lys Glu Ala Lys
   50          55          60
Glu Ile Met Gln Glu Cys Val Ser Glu Phe Ile Ser Phe Val Thr Gly
   65          70          75          80
Glu Ala Ser Asp Lys Cys His Lys Glu Lys Arg Lys Thr Ile Asn Gly
          85          90          95
Asp Asp Ile Leu Trp Ala Met Thr Thr Leu Gly Phe
          100          105

```

```

<210> 1091
<211> 90
<212> PRT
<213> Pinus radiata

```

```

<400> 1091
Arg Asn Ile Gln Arg Asn Glu Tyr His Asn Leu Phe Asn Phe Ile Ser
 1          5          10          15
Ser Lys Gly Leu Lys Ile Met Asn Leu Gly Asp Ala His Gly Thr Ser
          20          25          30
Gly Val Ala Ala Val Leu Glu Asn Ser Asp Asp Glu Ala Val Asp Pro
          35          40          45
His Leu Glu Arg Ile Lys Ser Ala Arg Glu Gly Gly Ala Gly Glu Asp
   50          55          60
Ser Asp Glu Glu Ala Cys Tyr Thr Gly Asp Leu Ser Leu Ile Cys Ala
   65          70          75          80
Val Val Lys Glu Leu Ile Cys Thr His Asp
          85          90

```

```

<210> 1092
<211> 133
<212> PRT
<213> Pinus radiata

```

```

<400> 1092
Met Gly Cys Val Ser Ser Lys Val Glu Asn Glu Glu Leu Val Lys Arg
 1          5          10          15
Cys Arg Asp Arg Arg Arg Leu Met Lys Gln Ala Val Asn Ser Arg His
          20          25          30
Asn Phe Ala Ala Ala His Ile Ala Tyr Leu Arg Ala Leu Gln Asn Thr

```

```

      35              40              45
Gly Asn Ala Leu Val Gln Phe Ala Glu Gly Glu Ser Ser Ala Met Asn
  50              55              60
Gly Asn Ala Ile Glu Glu Ala Ala Thr Pro Met Pro Ala Thr Pro Leu
65              70              75              80
Thr Ala Ser His Arg His Pro Met Lys Phe His Pro Pro Pro Pro Pro
      85              90              95
Pro Pro Pro Pro Leu Val Pro Ser Ser Pro Ser Val Ser Pro Ser Met
      100              105              110
Glu Ser Phe Arg Met Pro Ser Lys His Asn Pro Leu Ser Arg Ser Thr
      115              120              125
Ser Asp Ile Ser Tyr
130

```

<210> 1093
 <211> 148
 <212> PRT
 <213> Pinus radiata

```

      <400> 1093
Met Gly Arg Ala Pro Cys Cys Thr Lys Val Gly Leu Asn Lys Gly Ala
  1              5              10              15
Trp Ser Ala Glu Glu Asp Ser Leu Leu Gly Arg Tyr Ile Gln Thr His
      20              25              30
Gly Glu Gly Asn Trp Arg Ser Leu Pro Lys Lys Ala Gly Leu Arg Arg
      35              40              45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu Arg Pro Cys
      50              55              60
Ile Lys Arg Gly Asn Ile Thr Thr Asp Glu Glu Glu Leu Ile Ile Arg
65              70              75              80
Met His Ala Leu Leu Gly Asn Arg Trp Ser Ile Ile Ala Gly Arg Val
      85              90              95
Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr Asn Leu
      100              105              110
Ser Lys Lys Leu Ala Val Arg Gly Ile Asp Pro Lys Thr His Lys Lys
      115              120              125
Ile Thr Thr Asp Gly Thr Asn Arg Val Asn Gly Asp Arg Phe Ser Gln
      130              135              140
Arg Lys Gly Glu
145

```

<210> 1094
 <211> 107
 <212> PRT
 <213> Pinus radiata

```

      <400> 1094
Arg Gln Leu Ile Arg Glu Leu Glu Gln Met Phe Asn Ile Glu Gly Glu
  1              5              10              15
Leu Glu Asp Pro Ser Lys Gly Trp Gln Val Val Tyr Thr Asp Asn Glu
      20              25              30
Gly Asp Met Met Leu Val Gly Asp Asp Pro Trp Gln Glu Phe Cys Ser
      35              40              45
Ile Val Arg Lys Ile Tyr Ile Tyr Thr Arg Glu Glu Val Glu Lys Met
      50              55              60
Thr Pro Gln Thr Pro Ser Ala Asn Ser Arg Asp Val Gln Lys Ser Leu
65              70              75              80
Ser Gln Glu Glu Thr Ser Arg Ser Ser Asp Arg Gln Asp Ser Ser Ile
      85              90              95
Ala Gly Val Thr Ala Glu Arg Ser Ser Asp Ala
      100              105

```

<210> 1095
 <211> 275
 <212> PRT
 <213> Pinus radiata

<400> 1095
 Met Ser Asn Gly Arg Leu Cys Glu Asp Leu Asp Arg Ile Lys Gly Pro
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Ala Ser Leu Gln Arg Leu Val Gln Lys Tyr
 20 25 30
 Gly Pro Arg Asn Trp Thr Leu Ile Ser Lys Gly Ile Pro Gly Arg Ser
 35 40 45
 Gly Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu Ser Pro Gln Val
 50 55 60
 Glu His Arg Pro Phe Thr Pro Ser Glu Asp Ala Ala Ile Leu Gln Ala
 65 70 75 80
 His Ala Gln His Gly Asn Lys Trp Ala Thr Ile Ala Arg Ala Leu Pro
 85 90 95
 Gly Arg Thr Asp Asn Ala Ile Lys Asn His Trp Asn Ser Thr Leu Arg
 100 105 110
 Arg Arg Cys Arg Asp Pro Lys Lys Gly Ile Val Val His Leu Asp Asp
 115 120 125
 Glu Ile Ser Ser Leu Asp Ala Ala Arg Lys Arg Ser Ser Asp Gly Phe
 130 135 140
 Ser His Asp Gly Ser Ser Ala Leu Glu Asp Asn Gly Cys Ser Ser Trp
 145 150 155 160
 Glu Val Asp Ser Lys Arg Leu Lys Arg Leu Gly Glu Leu Gly Thr Glu
 165 170 175
 Gln Gly Pro Glu Val Glu Ala Glu Val Glu Val Ser Asp Arg Ser Asp
 180 185 190
 Ala Asn Pro Gly Arg Val Leu Tyr Arg Pro Val Pro Val Val Ser Phe
 195 200 205
 Phe Ser Ser Phe Gly Lys Thr Val Ala Asn Leu Gln Glu Thr Ala Ala
 210 215 220
 Gly Ala Val Gly Val Asp Pro Pro Thr Ser Leu Ser Leu Ser Leu Pro
 225 230 235 240
 Gly Leu Asp Pro Ala Ile Pro Ser Pro Lys Leu Ser Thr Gln Lys Asp
 245 250 255
 Ser His Asn Asn Ser Thr Val Asn Asn Asn Ile Pro Ile Pro Pro Val
 260 265 270
 Val Asn Thr
 275

<210> 1096
 <211> 128
 <212> PRT
 <213> Pinus radiata

<400> 1096
 Glu Phe Gly Arg Ser Ser Glu Lys Gly Arg Gly Tyr Gly Arg Gly Arg
 1 5 10 15
 Gly Arg Gly Gly Arg Gly Gly Tyr Gly Asn Asp Ala Gly Asp Glu Ser
 20 25 30
 Gln Arg Pro Arg Arg Gln Tyr Glu Arg Arg Ser Gly Thr Gly Arg Gly
 35 40 45
 Tyr Glu Val Lys Arg Glu Gly Ala Gly Gln Gly Asn Trp Gly Thr Pro
 50 55 60
 Thr Asp Gln Gly Phe Thr Glu Glu Pro Glu Glu Leu Ser Arg Ala Glu
 65 70 75 80
 Glu Glu Lys Thr Val Thr Pro Glu Lys Gln Glu Glu Gln Lys Pro Ser

				85					90					95			
Glu	Glu	Ser	Asn	Gln	Glu	Ile	Pro	Ala	Pro	Glu	Ser	Glu	Glu	Lys	Lys		
			100					105					110				
Glu	Glu	Glu	Glu	Asp	Lys	Asp	Met	Thr	Leu	Asp	Glu	Tyr	Glu	Lys	Val		
			115				120					125					

<210> 1097
 <211> 135
 <212> PRT
 <213> Pinus radiata

<400> 1097

Ala	Val	Asn	Ser	Ser	Leu	Ser	Val	Gly	Met	Arg	Phe	Lys	Met	Arg	Phe		
1				5					10					15			
Glu	Gly	Glu	Glu	Ser	Pro	Glu	Arg	Arg	Phe	Thr	Gly	Thr	Ile	Ile	Gly		
			20					25					30				
Met	Gly	Glu	Val	Asp	Asn	Val	Arg	Trp	Pro	Glu	Ser	Lys	Trp	Arg	Ser		
		35					40					45					
Leu	Lys	Val	Gln	Trp	Asp	Glu	Thr	Ser	Val	Val	Pro	Arg	Pro	Glu	Arg		
	50				55					60							
Val	Ser	Pro	Trp	Glu	Ile	Glu	Thr	Phe	Val	Ala	Ser	Ser	Ala	Ala	Leu		
65					70				75						80		
Asn	Pro	Leu	Pro	Ala	Pro	Arg	Thr	Lys	Lys	Pro	Arg	Pro	Asn	Leu	Val		
				85				90					95				
Ser	Ser	Ser	Gln	Glu	Leu	Met	Ile	His	Gly	Ser	Gly	Lys	Thr	Ala	Thr		
			100					105					110				
Asp	Ser	Ser	Gln	Val	His	Arg	Leu	Pro	Arg	Val	Leu	Gln	Gly	Gln	Glu		
		115					120					125					
Met	Arg	Thr	Phe	Gly	Gly	Ser											
		130				135											

<210> 1098
 <211> 46
 <212> PRT
 <213> Pinus radiata

<400> 1098

Ala	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Leu	Asn	Tyr	Leu	Arg	Pro	Asp	Ile		
1				5					10					15			
Lys	Arg	Gly	Asn	Ile	Ser	Pro	Glu	Glu	Glu	Glu	Leu	Ile	Ile	Arg	Leu		
			20					25					30				
His	Arg	Leu	Leu	Gly	Asn	Arg	Tyr	Val	Glu	Asn	Arg	Gly	Thr				
		35					40					45					

<210> 1099
 <211> 113
 <212> PRT
 <213> Pinus radiata

<400> 1099

Met	Gly	Arg	Ser	Pro	Cys	Cys	Ser	Lys	Glu	Gly	Leu	Asn	Arg	Gly	Ala		
1				5					10					15			
Trp	Thr	Lys	Arg	Glu	Asp	Met	Ile	Leu	Ser	Glu	Tyr	Val	Arg	Ile	His		
			20					25					30				
Gly	Asp	Gly	Gly	Trp	Arg	Asn	Leu	Pro	Glu	Lys	Ala	Gly	Leu	Lys	Arg		
		35					40					45					
Cys	Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Leu	Asn	Tyr	Leu	Arg	Pro	Asp		
	50				55					60							
Ile	Lys	Arg	Gly	Asn	Ile	Cys	Pro	Ala	Glu	Glu	Glu	Leu	Ile	Ile	Arg		
65					70				75						80		
Leu	His	Arg	Leu	Leu	Gly	Asn	Arg	Trp	Ser	Leu	Ile	Ala	Gly	Arg	Leu		

85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Leu
 100 105 110
 Ser

<210> 1100
 <211> 148
 <212> PRT
 <213> Pinus radiata

<400> 1100
 Pro Tyr Leu His Glu Ser Arg His Leu His Ala Met Lys Arg Ala Arg
 1 5 10 15
 Gly Cys Gly Gly Arg Phe Leu Asn Thr Lys Lys Leu Glu Asp Ser Lys
 20 25 30
 Ala Asn Val Asp Asn Gly Lys Thr Pro Glu Gly His Thr Ala Gln Ala
 35 40 45
 Gly Ser Ser Ser Gly Ser Glu Val Leu Gln Ser Glu Asn Gly Asn Gly
 50 55 60
 Asn Ser Thr Gln Glu Leu His Gly Ala Cys Gly Met Ser Gly Ser Gln
 65 70 75 80
 Val Thr Ser Ile Ala Gln Ser Ser Glu Asn Gly Thr Thr Tyr Gln Tyr
 85 90 95
 Ser His Thr Asn Gly Ala Tyr Leu Asn His Tyr Gln His Pro His Phe
 100 105 110
 His Ile Ser Ala Phe His Pro Leu Ser Ser Gly Gly Glu Glu Gly Ser
 115 120 125
 Ser Ala Lys Gly Gly Ser Ile Ile Ser Gly Gly Ser Gln Gln Arg Val
 130 135 140
 Val Val Ile Gln
 145

<210> 1101
 <211> 48
 <212> PRT
 <213> Pinus radiata

<400> 1101
 Met Gly Arg Ser Pro Cys Pro Pro Lys Glu Ala Leu Asn Arg Gly Ala
 1 5 10 15
 Trp Thr Gly Met Glu Asp Thr Ile Leu Thr Glu Tyr Ile Arg Val His
 20 25 30
 Gly Ser Gly Gly Trp Lys Ala Ile Ser Lys Arg Ala Gly Glu Cys Gln
 35 40 45

<210> 1102
 <211> 191
 <212> PRT
 <213> Pinus radiata

<400> 1102
 Val Thr Arg Pro Gly Lys Phe Arg Ser Cys Gln Asp Gly Tyr Ala Val
 1 5 10 15
 Arg Ala Ser Leu Lys Ala Glu Asp Gly Val Leu Tyr Pro Leu Glu Lys
 20 25 30
 Ser Phe Phe Phe Leu Pro Lys Pro Thr Leu Ile Leu His Glu Glu
 35 40 45
 Ile Glu Tyr Leu Glu Phe Glu Arg His Gly Ala Ala Gly Thr Ser Ser
 50 55 60
 Met Ser Ser His Tyr Phe Asp Leu Ile Ile Lys Leu Lys Ser Glu Gln

65					70					75				80	
Glu	His	Gln	Phe	Arg	Asn	Ile	Gln	Arg	Asn	Glu	Tyr	His	Asn	Leu	Phe
				85					90					95	
Ser	Phe	Ile	Asn	Thr	Lys	Gly	Leu	Lys	Ile	Ile	Asn	Leu	Gly	Ala	Thr
			100					105						110	
Glu	Thr	Ile	Gly	Gly	Val	Ala	Ala	Ala	Leu	Gln	Asn	Ser	Asp	Asp	Glu
		115					120						125		
Ala	Val	Asp	Pro	His	Leu	Glu	Arg	Ile	Lys	Ile	Tyr	Val	Met	Val	Glu
		130				135						140			
Leu	Val	Leu	Lys	Thr	Ala	Thr	Lys	Arg	Met	Lys	Thr	Leu	Leu	Gln	Lys
145					150					155					160
Thr	Met	Met	Leu	Asp	Leu	Gln	Gln	Met	Ser	Gln	Lys	Lys	Arg	Asp	Gln
				165					170					175	
Met	Gln	Val	Arg	Val	Gln	Arg	Ser	Ser	Asn	Leu	Gln	Arg	Lys	Lys	
			180					185						190	

<210> 1103

<211> 106

<212> PRT

<213> Pinus radiata

<400> 1103

Met	Ser	Pro	Pro	Pro	Ser	Tyr	Ser	Met	Phe	Pro	Asn	Ser	Gly	Met	Gly
1				5					10					15	
Leu	Asn	Pro	Ser	Val	Thr	Ser	Ser	Glu	Pro	Ser	Ser	Gln	Val	Ser	Gly
			20					25					30		
Ser	Ile	Pro	His	Gln	Tyr	Ser	Gly	Ser	Glu	Glu	Asp	Pro	Lys	Leu	Thr
		35					40					45			
Ile	Asp	Glu	Arg	Lys	Gln	Lys	Arg	Met	Leu	Ser	Asn	Arg	Glu	Ser	Ala
	50					55					60				
Arg	Arg	Ser	Arg	Met	Arg	Lys	Gln	Gln	His	Leu	Asp	Glu	Leu	Arg	Ala
65					70					75					80
Arg	Thr	Ala	His	Leu	Arg	Ala	Glu	Asn	Ser	His	Met	Leu	Thr	Lys	Phe
			85						90					95	
Asn	Ile	Ala	Ser	Gln	Lys	Tyr	Met	Gln	Leu						
			100					105							

<210> 1104

<211> 162

<212> PRT

<213> Pinus radiata

<400> 1104

Arg	Gly	Gln	Pro	Arg	Arg	His	Leu	Leu	Thr	Thr	Gly	Trp	Ser	Val	Phe
1				5					10					15	
Val	Ser	Ala	Lys	Arg	Leu	Val	Ala	Gly	Asp	Ala	Phe	Ile	Phe	Leu	Arg
			20					25					30		
Gly	Glu	Asn	Ser	Glu	Leu	Arg	Val	Gly	Val	Arg	Arg	Val	Met	Arg	Gln
		35					40					45			
Gln	Ser	Asn	Met	Pro	Ser	Ser	Val	Ile	Ser	Ser	His	Ser	Met	His	Leu
		50				55					60				
Gly	Val	Ile	Ala	Thr	Ala	Ser	His	Ala	Val	Thr	Thr	Arg	Thr	Met	Phe
65					70					75					80
Thr	Val	Tyr	Tyr	Lys	Pro	Arg	Thr	Ser	Gln	Ser	Glu	Phe	Ile	Ile	Pro
			85						90					95	
Tyr	Asp	Lys	Tyr	Met	Glu	Ala	Val	Asn	Ser	Asn	Leu	Ser	Val	Gly	Met
			100					105					110		
Arg	Phe	Lys	Met	Arg	Phe	Glu	Gly	Glu	Glu	Ala	Pro	Glu	Arg	Arg	Phe
		115					120					125			
Thr	Gly	Thr	Ile	Ile	Gly	Ile	Gly	Asp	Val	Asp	Pro	Ser	Arg	Trp	Pro
		130				135					140				

Ser Ser Lys Trp Arg Ser Leu Lys Val Gln Trp Asp Glu Thr Cys Ala
 145 150 155 160
 Ile Pro

<210> 1105
 <211> 115
 <212> PRT
 <213> Pinus radiata

<400> 1105
 Met Ala Gln Ser Glu Glu Gln Pro Asn Glu Ala Thr Val Pro Arg Pro
 1 5 10 15
 Ala Asp Ser His Arg Ser Ile Pro Thr Pro Phe Leu Met Lys Thr Tyr
 20 25 30
 Arg Leu Val Asp Asp Pro Ser Leu Asn Asp Ile Ile Ser Trp Asn Glu
 35 40 45
 Asp Gly Thr Thr Phe Ile Val Trp Arg Pro Ala Glu Phe Ala Arg Asp
 50 55 60
 Leu Leu Pro Asn Tyr Phe Lys His Asn Asn Phe Ser Ser Phe Val Arg
 65 70 75 80
 Gln Leu Asn Thr Tyr Gly Phe Arg Lys Ile Val Pro Asp Arg Trp Glu
 85 90 95
 Phe Ala Asn Glu Phe Phe Arg Arg Gly Glu Lys Lys Leu Leu Cys Glu
 100 105 110
 Ile His Arg
 115

<210> 1106
 <211> 37
 <212> PRT
 <213> Pinus radiata

<400> 1106
 Met Gly Arg Ala Pro Cys Cys Thr Lys Val Gly Leu Asn Lys Gly Ala
 1 5 10 15
 Trp Ser Ala Glu Glu Asp Ser Leu Leu Gly Arg Tyr Ile Gln Thr His
 20 25 30
 Gly Glu Gly Asn Trp
 35

<210> 1107
 <211> 187
 <212> PRT
 <213> Pinus radiata

<400> 1107
 Thr Arg Ser Gly Ser Lys Asn Ser Ala Arg Ala Pro Val Ser Gly Phe
 1 5 10 15
 Ser Met Asn Ser Asn Met Gly Val Ser Gly Gly Leu Asp Glu Ser Gly
 20 25 30
 Phe Ser Gln Pro Pro Pro Asn Phe Ala Lys Met Asn Ala Pro Thr Arg
 35 40 45
 Thr Phe Thr Lys Val Tyr Lys Leu Gly Ser Val Gly Arg Ser Val Asp
 50 55 60
 Val Thr Arg Phe Arg Gly Tyr Pro Asp Leu Arg Ala Glu Leu Asp Arg
 65 70 75 80
 Met Phe Gly Leu Glu Gly Gln Leu Glu Asn Pro Arg Ser Ser Trp Gln
 85 90 95
 Leu Val Phe Val Asp Lys Glu Lys Asp Val Leu Leu Leu Gly Asp Asp
 100 105 110

Pro Trp Glu Glu Phe Val Asn Asn Val Arg Phe Ile Lys Ile Leu Ser
 115 120 125
 Pro Pro Glu Val Gln Gln Met Ser Gln Glu Asp Met Glu Phe Trp Ser
 130 135 140
 Ser Ile Pro Thr Gln Gln Thr Ser Ser Ser Asp Asp Cys Val
 145 150 155 160
 Ala Arg Asn Ser Ser Arg Asn Ile Arg Ser Val Leu Thr Ser Pro Gly
 165 170 175
 Ser Leu Asp Val Leu Ser Val Asp Pro Ile Val
 180 185

<210> 1108
 <211> 130
 <212> PRT
 <213> Pinus radiata

<400> 1108
 His Asp Asn Glu Trp Lys Phe Arg His Ile Tyr Arg Gly Gln Pro Lys
 1 5 10 15
 Arg His Leu Leu Thr Thr Gly Trp Ser Val Phe Val Ser Ala Lys Arg
 20 25 30
 Leu Ser Ala Gly Asp Ala Val Leu Phe Ile Arg Asn Glu Lys Gly Gln
 35 40 45
 Leu Leu Leu Gly Ile Arg Arg Ala Asn Arg Ser Gln Thr Val Met Pro
 50 55 60
 Ser Ser Val Leu Ser Ser Asp Ser Met His Ile Gly Val Leu Ala Ala
 65 70 75 80
 Ala Ala His Ala Ala Ser Thr Asn Cys Arg Phe Thr Ile Phe Tyr Asn
 85 90 95
 Pro Arg Ala Ser Pro Ser Glu Phe Val Ile Pro Leu Ser Lys Tyr Glu
 100 105 110
 Lys Ala Val Tyr His Thr Arg Val Ser Ile Gly Met Arg Phe Arg Met
 115 120 125
 Leu Phe
 130

<210> 1109
 <211> 81
 <212> PRT
 <213> Pinus radiata

<400> 1109
 Met Gly Arg Thr Pro Cys Cys Glu Lys Gly His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
 20 25 30
 Gly Glu Gly Arg Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro His
 50 55 60
 Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Phe Ile Ile Lys
 65 70 75 80
 Leu

<210> 1110
 <211> 146
 <212> PRT
 <213> Pinus radiata

<400> 1110

Met Gly Arg Ala Pro Cys Trp Asp Lys Met Gly Val Lys Lys Gly Ala
 1 5 10 15
 Trp Thr Leu Asp Glu Asp Lys Ile Leu Val Asp Tyr Ile Thr Lys His
 20 25 30
 Gly His Gly Asn Trp Arg Ala Leu Pro Lys Gln Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Lys Pro Asp
 50 55 60
 Ile Lys Arg Gly Asn Phe Ser Pro Glu Glu Glu Asp Gln Ile Ile Lys
 65 70 75 80
 Leu His Glu Leu Ile Gly Asn Arg Trp Ser Thr Ile Ala Ser Tyr Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Val Trp Asn Thr His Leu
 100 105 110
 Lys Lys Arg Leu Ala Arg Met Lys Ala Asp Ser Val Ala Val Asp Ala
 115 120 125
 Gln Pro Thr Pro Ala Ser Ser Leu Ala Ser Ser Thr Thr Glu Met Thr
 130 135 140
 Cys His
 145

<210> 1111
 <211> 72
 <212> PRT
 <213> Pinus radiata

<400> 1111
 Cys Ile Glu Ala Asn Gly Gly Gly Ala Pro Gly Arg Ser Leu Pro Lys
 1 5 10 15
 Ala Ala Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile
 20 25 30
 Asn Tyr Leu Arg Pro Asp Asp Val Lys Arg Gly Asn Phe Thr Glu Glu
 35 40 45
 Glu Asp Asp Leu Ile Ile Lys Leu His Ser Leu Leu Gly Asn Lys Trp
 50 55 60
 Ser Leu Ile Ala Gly Arg Leu Pro
 65 70

<210> 1112
 <211> 112
 <212> PRT
 <213> Pinus radiata

<400> 1112
 Met Arg Arg Leu Arg Cys Glu Lys Gly Asn Thr Asn Lys Gly Ala Trp
 1 5 10 15
 Thr Gln Gln Glu Asp Ala Arg Leu Ile Ala Tyr Ile Arg Ala His Gly
 20 25 30
 Glu Gly Gly Trp His Ser Leu Pro Arg Ala Ala Gly Leu Arg Cys
 35 40 45
 Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asn Leu
 50 55 60
 Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Asp Leu Ile Ile Lys Leu
 65 70 75 80
 His Asn Leu Leu Gly Asp Lys Trp Ser Leu Ile Ala Gly Arg Leu Pro
 85 90 95
 Gly Arg Met Glu Asp Gln Ile Lys Asn Tyr Trp Asp Thr His Phe Lys
 100 105 110

<210> 1113
 <211> 148

<212> PRT

<213> Pinus radiata

<400> 1113

Gly Lys Glu Val His Ile Ala Glu Pro Asp Gln Val Ser Asp Pro Pro
 1 5 10 15
 Lys Ala Ile Lys Tyr Glu Pro Pro Ala Val Ser Cys Asp Gln Glu Lys
 20 25 30
 Pro Leu Gln Lys Leu Ser Lys Glu Thr Gln Val Lys Gln His Gly Asn
 35 40 45
 Pro Thr Arg Ser Cys Thr Lys Val His Lys Gln Gly Ile Ala Leu Gly
 50 55 60
 Arg Ala Val Asp Leu Thr Lys Phe Glu Gly Tyr Glu Glu Leu Ile Cys
 65 70 75 80
 Glu Leu Glu Arg Met Phe Asn Ile Glu Gly Glu Leu Arg Asn Pro Ser
 85 90 95
 Lys Gly Trp Gln Val Val Tyr Thr Asp Asn Glu Gly Asp Met Met Leu
 100 105 110
 Val Gly Asp Asp Pro Trp Gln Glu Phe Cys Ser Ile Val Arg Lys Ile
 115 120 125
 Phe Ile Tyr Thr Arg Glu Glu Val Glu Lys Met Thr Pro Gln Lys His
 130 135 140
 Ala Lys Leu Gln
 145

<210> 1114

<211> 273

<212> PRT

<213> Pinus radiata

<400> 1114

Glu Thr Gln Ser Ser Asp Asn Asn Tyr Met Val Gly Phe Val Leu Ala
 1 5 10 15
 Asn Val Val Gly Leu Gln Tyr Tyr Thr Gly Thr Ile Asn Gly Arg Glu
 20 25 30
 Met Ile Arg Leu Val Arg Glu Pro Glu Asn Arg Tyr Asp Pro Asn Ala
 35 40 45
 Ile Lys Val Leu Asn Met Ser Gly Gln Gln Val Gly His Ile Glu Arg
 50 55 60
 Ala Val Ala Leu Ala Leu Ala Ser His Val Asp Gln Ser Leu Ile Leu
 65 70 75 80
 Ile Glu Gly Ile Val Ser Arg Ala Leu His Lys Gly Ala Tyr Lys Leu
 85 90 95
 Pro Cys Gln Ile Tyr Ile Phe Ser His Arg Asp Ser Met Gly Met Val
 100 105 110
 Leu Gln Leu Leu Lys Gly Ala Gly Leu Asn Val Ile Thr Ala Glu Asp
 115 120 125
 Gln Glu Phe Leu Thr Ala Glu Ser Ile Ala Ala Lys Glu Ile Tyr Glu
 130 135 140
 Asp Pro Gly Val Lys Glu Val Arg Arg Val Asp Asp Ile Phe Gly Ser
 145 150 155 160
 Leu Asn Asn Pro Lys Lys Arg Gln Ser Met Glu Ala Cys Glu Leu Val
 165 170 175
 Thr Ser Thr Leu Leu Gln His Gln Lys Glu Ala Leu Ala Trp Met Val
 180 185 190
 Gln Arg Glu Asn Ser Ser Glu Leu Pro Pro Phe Trp Asp Val Cys Asp
 195 200 205
 Lys Thr Ser Lys Ser Gln Gln Leu Arg Tyr Lys Asn Val Leu Thr Asn
 210 215 220
 Phe Glu Thr Asn Gly Arg Pro Lys Pro Leu Arg Gly Gly Ile Leu Ala
 225 230 235 240

[illegible]

```
<210> 1115
<211> 129
<212> PRT
<213> Pinus radiata
```

[illegible]

```
<210> 1116
<211> 90
<212> PRT
<213> Pinus radiata
```

Met Asp Arg Glu Lys Leu Met Lys Met Ala Gly Ala Val Arg Thr Gly															
1				5					10					15	
Gly	Lys	Gly	Thr	Met	Arg	Arg	Lys	Lys	Lys	Thr	Ile	His	Lys	Thr	Ala
			20					25					30		
Thr	Ala	Asp	Asp	Lys	Arg	Leu	Gln	Ser	Thr	Leu	Lys	Arg	Ile	Gly	Val
		35					40					45			
Asn	Asn	Ile	Pro	Ala	Ile	Glu	Glu	Val	Asn	Ile	Phe	Lys	Asp	Asp	His
	50					55					60				
Val	Ile	His	Phe	Ala	Asn	Pro	Lys	Val	Gln	Ala	Ser	Ile	Ala	Ala	Asn
65					70					75					80
Thr	Trp	Val	Gly	Ser	Gly	His	Arg	Lys	Gln						
				85					90						

```
<210> 1117
<211> 33
<212> PRT
<213> Pinus radiata
```

<400> 1117

Gly	Lys	Thr	Gln	Met	Lys	Leu	Lys	Arg	Glu	Arg	Asp	Gln	Gln	Ala	Arg
1				5					10					15	
Asp	Ala	Ser	Lys	Arg	Arg	Asn	Gly	Leu	Leu	Lys	Lys	Ala	Tyr	Glu	Leu
			20					25					30		

Ser

<210> 1118
 <211> 107
 <212> PRT
 <213> Pinus radiata

<400> 1118
 Met Gly Arg Ala Pro Cys Cys Ala Asn Gly Asp Arg Ser Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Asp Asp Arg Leu Thr Gln Tyr Ile Gln Ala His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Gly Phe Ser Glu Asp Glu Asp Leu Ile Leu Lys
 65 70 75 80
 Leu His Ala Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Gly His Gln Asn Gln Asn Tyr
 100 105

<210> 1119
 <211> 112
 <212> PRT
 <213> Pinus radiata

<400> 1119
 Arg Lys Ser Asn Val His Ser Phe Cys Lys Thr Leu Thr Ala Ser Asp
 1 5 10 15
 Thr Ser Thr His Gly Gly Phe Ser Val Leu Arg Arg His Ala Asp Glu
 20 25 30
 Cys Leu Pro Pro Leu Asp Met Ser Gln Gln Pro Pro Ser Gln Glu Leu
 35 40 45
 Val Ala Arg Asp Leu His Gly Met Glu Trp Arg Phe Arg His Ile Phe
 50 55 60
 Arg Gly Gln Pro Arg Arg His Leu Leu Thr Thr Gly Trp Ser Val Phe
 65 70 75 80
 Val Ser Ser Lys Arg Leu Val Ala Gly Asp Ala Phe Ile Phe Leu Arg
 85 90 95
 Gly Glu Ser Gly Glu Leu Arg Val Gly Val Arg Arg Ala Met Arg Gln
 100 105 110

<210> 1120
 <211> 156
 <212> PRT
 <213> Pinus radiata

<400> 1120
 Ala Leu Arg Glu Ala Ile Lys Asn Gly Ala Cys Pro Asn Cys Gly Gly
 1 5 10 15
 Ser Thr Ser Leu Gly Glu Met Pro Gly Phe Asp Glu His His Phe Arg
 20 25 30
 Ile Glu Asn Thr Arg Leu Lys Glu Glu Leu Asp Arg Val Ser Gly Ile
 35 40 45
 Ala Thr Lys Tyr Ile Gly Arg Ser Met Pro His Leu Ala Pro Ile Ala
 50 55 60
 Thr Pro Pro Met Leu Met Ser Ser Leu Glu Leu Ala Met Gly Ser Phe
 65 70 75 80

Gly	Gly	Lys	Gln	Ser	Gln	Pro	Ala	Ala	Pro	Ser	Val	Asp	Phe	Ile	Ser
				85					90					95	
Gly	Pro	Leu	Ala	Asp	Gly	Pro	Ile	Ile	Asn	Cys	Gly	Thr	Leu	Thr	Asp
			100					105					110		
Leu	Asp	Lys	Pro	Leu	Ala	Leu	Glu	Leu	Ala	Met	Asn	Gly	Val	Glu	Glu
		115					120					125			
Leu	Ile	Arg	Met	Ala	Gln	Thr	Asp	Glu	Pro	Leu	Trp	Leu	Lys	Asp	Val
	130					135					140				
Asn	Ala	Gly	Ser	Val	Lys	Glu	Leu	Phe	Glu	Leu	Gly				
145					150					155					

```
<210> 1121
<211> 116
<212> PRT
<213> Pinus radiata
```

[illegible]

```
<210> 1122
<211> 104
<212> PRT
<213> Pinus radiata
```

	<400> 1122														
Phe 1	Leu	Phe	Asp	Ser 5	Leu	Asp	Ala	Val	Asn 10	Ile	Asn	Met	Glu	Ala 15	Val
His	Lys	Ile	Glu 20	Lys	Phe	Leu	Leu	Ala 25	Pro	Lys	Ile	Asp	Ala 30	Thr	Ile
Ser	Ser	Ala 35	Ala	Ala	Pro	Pro	Trp 40	Lys	Thr	Leu	Phe	Ala 45	Ala	Ala	Gly
Phe 50	Ser	Pro	Val	Ala	Phe	Ser 55	Asn	Phe	Thr	Glu	Thr 60	Gln	Ala	Glu	Tyr
Leu 65	Ile	Gln	Arg	Leu 70	His	Ser	Arg	Gly	Phe 75	Glu	Val	Glu	Lys	Ala	His 80
Ala	Ala	Leu	Leu 85	Leu	Gly	Trp	Gln	Gly	Arg 90	Pro	Leu	Val	Ser 95	Ala	Thr
Ala	Trp	Arg	Cys 100	Gly	Pro	Pro	Pro								

```
<210> 1123
<211> 169
<212> PRT
<213> Pinus radiata
```

<400> 1123

Glu Glu Lys Gln Leu Ser Ile Ser Gly Arg Asn Trp Gly Glu Val Asn
 1 5 10 15
 Leu Glu Gly Asn Met Leu Thr Phe Leu Val Gly Ser Lys Pro Ala Phe
 20 25 30
 Glu Val Ser Leu Ala Asp Val Ser Gln Thr Gln Leu Gln Gly Lys Asn
 35 40 45
 Asp Val Val Leu Glu Phe His Val Asp Asp Thr Thr Gly Ala Asn Glu
 50 55 60
 Lys Asp Ser Leu Met Glu Leu Ser Phe His Ile Pro Asn Ser Asn Thr
 65 70 75 80
 Thr Phe Ala Gly Asp Glu Ala Ser Pro Pro Ala Gln Ile Phe Arg Glu
 85 90 95
 Lys Ile Met Ser Met Ala Asp Val Gly Ser Ser Gly Gly Glu Ala Val
 100 105 110
 Ala Leu Phe Glu Asp Ile Ala Ile Leu Thr Pro Arg Gly Arg Tyr Thr
 115 120 125
 Ile Glu Leu His Leu Ser Phe Met Arg Leu Gln Gly Gln Ala Ser Asp
 130 135 140
 Phe Lys Ile Gln Tyr Ser Ser Val Leu Arg Leu Phe Val Leu Pro Lys
 145 150 155 160
 Ser Pro His Thr Leu Val Val Ile Thr
 165

<210> 1124
 <211> 124
 <212> PRT
 <213> Pinus radiata

<400> 1124
 Leu Gly His Ser Gln Asn Phe Ser Thr Asp Val Asn Arg Met Pro Asp
 1 5 10 15
 Val Pro Pro Arg Arg Gly Gly His Arg Arg Ala Gln Ser Glu Ile Ala
 20 25 30
 Phe Arg Leu Pro Asp Asp Ile Met Phe Asp Gly Asp Leu Gly Phe Ala
 35 40 45
 Gly Phe Asp Met Pro Thr Val Ser Asp Asp Ala Thr Glu Ala Glu Asp
 50 55 60
 Leu Ile Ser Met Tyr Met Asp Met Glu Lys Leu Thr Ser Phe Gly Glu
 65 70 75 80
 Pro Leu Asn Ser Ala Ala Gly Glu Gly Ser Lys Leu Pro Ser Gly Ala
 85 90 95
 Glu Thr Asn Arg Pro Pro His His Ser Arg Ser Leu Ser Val Asp Ala
 100 105 110
 Val Phe Ser Gly Phe Glu Gly Asn Met Glu Asp Thr
 115 120

<210> 1125
 <211> 70
 <212> PRT
 <213> Pinus radiata

<400> 1125
 Met Asp Arg Ser Ser Ser Glu Asp Ser Val Asp Ser Gln Gly Asp Val
 1 5 10 15
 Asn Ala Asn Tyr Lys Met Val Phe Ser Glu Asp Glu Lys Asp Leu Ile
 20 25 30
 Ser Arg Leu Tyr Asn Leu Leu Gly Gln Arg Trp Ala Leu Ile Ala Gly
 35 40 45
 Arg Ile Pro Gly Arg Thr Ala Glu Glu Ile Glu Lys Tyr Cys Ser Arg
 50 55 60
 Arg Tyr Ile Ser Glu Tyr

65

70

<210> 1126
 <211> 120
 <212> PRT
 <213> Pinus radiata

<400> 1126
 Gly Gly Glu Ile Arg Ile Leu Arg Gly Phe Phe Val Asn Gln Lys Thr
 1 5 10 15
 Asp Gly Gln Gly Ser Ser Phe Ala Ala Ser Ser Ser Arg Asn Ser Ser
 20 25 30
 Phe Ser Asn Gly Tyr Asp Asn Pro Gln Asn Thr Asn Lys Asn Ser Ser
 35 40 45
 Ser Gly Gly Thr Gly Asp Ala Gly Ser Phe Glu Cys Asn Ile Cys Leu
 50 55 60
 Glu Leu Ala Gln Asp Pro Ile Val Thr Leu Cys Gly His Leu Phe Cys
 65 70 75 80
 Trp Pro Cys Leu Tyr Lys Trp Leu His Gly His Ser Lys Ser Gln Glu
 85 90 95
 Cys Pro Val Cys Lys Ala Leu Val Glu Glu Asp Lys Ile Val Pro Leu
 100 105 110
 Tyr Gly Arg Gly Lys Val Gly Ser
 115 120

<210> 1127
 <211> 233
 <212> PRT
 <213> Pinus radiata

<400> 1127
 Met Gly Ala Pro Lys Gln Lys Trp Thr Ser Glu Glu Glu Gly Ala Leu
 1 5 10 15
 Lys Ala Gly Val Glu Lys Tyr Gly Thr Gly Lys Trp Arg Thr Ile Gln
 20 25 30
 Lys Asp Pro Glu Phe Gly His Cys Leu Ala Ala Arg Ser Asn Val Asp
 35 40 45
 Leu Lys Asp Lys Trp Arg Asn Met Ser Val Ser Ala Ser Gly Gln Gly
 50 55 60
 Ser Arg Asp Lys Val Lys Thr Pro Arg Val Lys Ala Ile Ala Ser Leu
 65 70 75 80
 Pro Tyr Ser Ser Val Thr Ala Glu Ser Thr Ser Val Phe Ser Ile Glu
 85 90 95
 Ala Thr Thr Ser Thr Thr Pro Asp Asn Leu Ile Ser Pro Lys Ser Ser
 100 105 110
 Ser Asn Gly Lys Ile His Ser Pro Arg Tyr Asp Gly Met Ile Leu Glu
 115 120 125
 Ala Leu Thr Ser Met Gln Asp Pro Asn Gly Ile Asp Ile Ala Thr Ile
 130 135 140
 Ala Ser Phe Met Glu Glu Arg His Glu Leu Pro Pro Asn Phe Lys Arg
 145 150 155 160
 Ala Leu Gly Thr Lys Leu Arg Arg Leu Val Ala Gln Glu Lys Val Ile
 165 170 175
 Lys Ile Arg Asn Ser Tyr Lys Leu Lys Asp Met Thr Ser Thr Glu Val
 180 185 190
 Thr Ser Glu Val Leu Gly Ser Ala Ile Pro Ile Asp Asn Ser Met Gln
 195 200 205
 Tyr Ser Asn Ala Phe Thr Asn Thr Ile Asp Thr Phe Ser Val Asp Arg
 210 215 220
 Val Asn Glu Ala Ser Met Ala Ala Ala
 225 230

<210> 1128
 <211> 144
 <212> PRT
 <213> Pinus radiata

<400> 1128
 His Ser Arg Pro Leu Ile Lys Glu Glu Ala Glu Ser Gly Asp Asn Ser
 1 5 10 15
 Ala Asn Ser Ala Asp Val Glu Thr Leu Leu Pro Gln Val Asp Glu Thr
 20 25 30
 Ala Ser Ala Asp Leu Thr Val Phe Pro Gly Phe Val Thr Pro Tyr Val
 35 40 45
 Pro Tyr Gly Phe Pro Ile Trp His Thr Phe Arg Pro Thr Ile Thr Gln
 50 55 60
 Thr Ser Asn Val Tyr Lys Pro Thr Ala Val Met Pro Thr Ala Pro Ile
 65 70 75 80
 Lys Met Asp Glu Cys Thr Gly Leu Ser Gln Leu Ser Leu Gly Gly Val
 85 90 95
 Ala Ala Ala Ser Ala Met Lys Pro Ser Glu Leu Ser Leu Lys Leu His
 100 105 110
 Gly Arg Pro Pro Ser Arg Gln Ser Ala Phe Gln Ala Lys Pro Ser Leu
 115 120 125
 Asn Glu Ser Ser Ser Leu Ser Ser Ser Asn Val Ile Ser Val Val
 130 135 140

<210> 1129
 <211> 187
 <212> PRT
 <213> Pinus radiata

<400> 1129
 His Pro Tyr Met Trp Gly Gly Gln Pro Leu Met Pro Pro Tyr Gly Thr
 1 5 10 15
 Pro Leu Pro Tyr Pro Ala Met Tyr Pro His Gly Gly Ile Tyr Ala His
 20 25 30
 Pro Ser Met Pro Pro Gly Ala Leu Pro Tyr Gly His Tyr Gly Met Pro
 35 40 45
 Ser Pro Gly Asn Ala Glu Val Thr Thr Thr Leu Ala Leu Pro Asn Ala
 50 55 60
 Glu Ala Glu Ala Lys Ser Ser Glu Gly Lys Glu Arg Asn Thr Met Lys
 65 70 75 80
 Arg Ser Lys Gly Ser Leu Gly Ser Leu Gly Met Ile Thr Gly Lys Gly
 85 90 95
 Gly Glu Gly Gly Lys Ala Thr Ser Gly Ser Ala Asn Glu Ala Met Ser
 100 105 110
 Gln Ser Gly Asp Ser Gly Ser Asp Gly Ser Ser Glu Gly Ser Glu Glu
 115 120 125
 Tyr Asn Thr Gln Thr Glu Ser Gln Val Ala Arg Lys Arg Ser Phe Asp
 130 135 140
 Gln Met Ile Val Asp Gly Ala Asn Ala Gln Ser Thr Asn Ile Gln Ser
 145 150 155 160
 Tyr Asn Ser Gln Ala Gly Glu Pro Tyr Val Thr Ser Gly Gly His Ala
 165 170 175
 Met Gly Asn Pro Ile Ser Gln Ala Val Ala Ala
 180 185

<210> 1130
 <211> 80
 <212> PRT
 <213> Pinus radiata

<400> 1130
 Gly Lys Val Thr Ala Ser Gly Lys Val Thr Ser Gly Val Asn Asp Leu
 1 5 10 15
 Phe Trp Glu Gln Phe Leu Thr Glu Thr Pro Gly Ser Ala Thr Asp Thr
 20 25 30
 Gln Glu Ala Glu Ser Lys Ile Gln Glu Thr Arg Thr Lys Asp Gln Asp
 35 40 45
 Glu Arg Leu Pro Glu Asn Gly Lys Cys Trp Ser Asn Lys Gln Thr Leu
 50 55 60
 Asp Gln Leu Thr Glu Gln Met Gly Gln Leu Ala Ser Gly Thr Gln Thr
 65 70 75 80

<210> 1131
 <211> 96
 <212> PRT
 <213> Pinus radiata

<400> 1131
 Met Asn Met Asp Ser Arg Gln Ser Gly Glu Glu Glu Asp Cys Asn Val
 1 5 10 15
 Thr Arg Pro Gly Gly Gly Gly Gly Ile Ser Leu His Val Ser Ser Val
 20 25 30
 Glu Tyr Cys Gln Lys Ser Ala Cys Val Ala His Asp Ile Ser Ser Asp
 35 40 45
 Glu Gln Asp Leu Ile Asn Arg Leu His Asn Leu Leu Gly Asp Arg Trp
 50 55 60
 Ala Leu Ile Ala Gly Arg Leu Pro Trp Arg Arg Arg Glu Glu Ile Glu
 65 70 75 80
 Asn Tyr Cys Lys Met Arg Tyr Thr Ala Thr Ser Ser Ser Arg Ser
 85 90 95

<210> 1132
 <211> 193
 <212> PRT
 <213> Pinus radiata

<400> 1132
 Glu Arg Glu Arg Gly Arg Lys Pro Ala Asn Gly Arg Glu Glu Pro Leu
 1 5 10 15
 Asn His Val Glu Ala Glu Arg Gln Arg Arg Glu Lys Leu Asn Gln Lys
 20 25 30
 Phe Tyr Glu Leu Arg Ala Val Val Pro Asn Val Ser Lys Met Asp Lys
 35 40 45
 Ala Ser Leu Leu Gly Asp Ala Ala Ala Tyr Ile Lys Asp Leu Phe Ser
 50 55 60
 Lys Gln Gln Asp Leu Glu Ser Glu Arg Val Asp Met Gln Val Gln Ile
 65 70 75 80
 Asp Thr Ile Lys Lys Glu Leu Leu Met Asn Ser Leu Lys Leu Ala Ala
 85 90 95
 Lys Glu Ala Lys Asp Leu Ser Ser Ile Asp Leu Lys Gly Phe Ser Gln
 100 105 110
 Gly Lys Phe Pro Gly Leu Asn Ser Glu Val Arg Ile Val Gly Arg Glu
 115 120 125
 Ala Ile Ile Arg Ile Gln Cys Thr Lys His Asn His Pro Val Ala Arg
 130 135 140
 Leu Met Ile Ala Leu Gln Glu Leu Asp Leu Glu Val Leu His Ala Ser
 145 150 155 160
 Ile Ser Thr Val Lys Asp Ser Leu Ile Ile Gln Thr Val Ile Val Lys
 165 170 175
 Met Thr Arg Gly Leu Tyr Thr Glu Asp Gln Leu His Ala Leu Leu Cys

Lys 180 185 190
 <210> 1133
 <211> 88
 <212> PRT
 <213> Pinus radiata
 <400> 1133
 Met Ala Tyr Asn Arg Lys His Ala Ala Ala Thr Ser Pro Asp Ser
 1 5 10 15
 Ser Leu Gly Ser Asp Asn Glu Ser Gly Gly Gly Gly Gly Gly Gly
 20 25 30
 Gly Lys Gly Gln Ser Thr Lys Asn Gly Asn Gly Asn Tyr Ile Arg Glu
 35 40 45
 Gln Asp Arg Leu Leu Pro Ile Ala Asn Val Gly Arg Ile Met Lys Arg
 50 55 60
 Ala Leu Pro Gly Asn Ala Lys Ile Ser Lys Asp Ala Lys Glu Thr Val
 65 70 75 80
 Gln Glu Cys Val Ser Glu Phe Ile
 85

<210> 1134
 <211> 141
 <212> PRT
 <213> Pinus radiata

<400> 1134
 Met Ala Thr Arg Asn Pro Phe Asp Leu Leu Glu Asp Asp Asp Asn Gly
 1 5 10 15
 Asp Pro Ser Ser Leu Leu Asp Thr Leu Ala Ala Ala Lys Asp Lys Pro
 20 25 30
 Ala Ala Val Ala Ala Lys Lys Gln Gln Pro Ala Val Ser Ala Ser Gly
 35 40 45
 Lys Leu Pro Thr Lys Pro Leu Pro Pro Ala Gln Ala Val Lys Glu Ser
 50 55 60
 Arg Val Ser Pro Asn Glu Gly Gly Arg Gly Arg Gly Gly Arg Gly
 65 70 75 80
 Gly Arg Gly Phe Gly Asn Arg Glu Ser Gln Glu Phe Gly Arg Gly Arg
 85 90 95
 Gly Gly Gly Tyr Asn Val Glu Arg Asn Phe Asn Arg Glu Asn Asn Ala
 100 105 110
 Tyr Ser Gly Ser Arg Val Gly Phe Tyr Asp Asn Asn Ser Asp Leu Ile
 115 120 125
 Pro Ser Arg Asn Glu Asp Gly Asp Gly Ala Ser Asn Asp
 130 135 140

<210> 1135
 <211> 43
 <212> PRT
 <213> Pinus radiata

<400> 1135
 Met Pro Arg Val Lys Leu Ile Ser Arg Asn Phe Met Asp Met Val Ala
 1 5 10 15
 Ala Leu Pro Ala Ala Lys Leu Asp Arg Leu Tyr Asp Lys Ser Leu His
 20 25 30
 Leu Arg Ser Gly Leu Arg Ser Leu Thr Pro Val
 35 40

<210> 1136
 <211> 48
 <212> PRT
 <213> Pinus radiata

<400> 1136
 Met Ala Glu Glu Met Asp Thr Pro Thr Lys Thr Thr Lys Thr Pro Thr
 1 5 10 15
 Ser Gln Glu Gln Thr Ser Thr Ser Thr Pro Val Ala Tyr Pro Glu Trp
 20 25 30
 Ala Ala Pro Ile Gln Ala Leu Tyr Asn Ser Gly Lys Thr Pro Leu Pro
 35 40 45

<210> 1137
 <211> 190
 <212> PRT
 <213> Pinus radiata

<400> 1137
 Ser Phe Ser Ser Thr Arg Glu Ser Met Glu Arg Arg Asp Gln Ser Pro
 1 5 10 15
 Val Ala Ala Arg His Pro Met Arg Lys His Tyr Arg Gly Val Arg Gln
 20 25 30
 Arg Gln Trp Gly Lys Trp Val Ala Glu Ile Arg Leu Pro Gln Asn Arg
 35 40 45
 Thr Arg Leu Trp Leu Gly Thr Phe Asp Thr Ala Glu Ala Ala Ala Leu
 50 55 60
 Ala Tyr Asp Arg Ala Ala Tyr Arg Trp Arg Gly Glu Cys Ala Arg Leu
 65 70 75 80
 Asn Phe Pro His Leu Phe Ser Lys Lys Tyr Gln Asn Ser Ser Pro Ser
 85 90 95
 Ser Thr Asn Gly Arg Ile Pro Arg Leu Ser Cys Glu Lys Ser Asp Gln
 100 105 110
 Lys Tyr Ala Tyr Asn Gly Asp Pro Val His Thr Asn Val Tyr Lys Gly
 115 120 125
 Pro Pro Ile Arg Ile Thr Ala Tyr Asn Gly Asp Pro Val Pro Ile Asp
 130 135 140
 Val Tyr Arg Ser Asp Pro Val Arg Val Ser Ala Tyr Thr Gly Asp Pro
 145 150 155 160
 Val Arg Ile Ser Ala Tyr Ser Gly Asp Pro Val Gly Asn Thr Val Thr
 165 170 175
 Leu Ala Glu Ser Glu Leu Glu Ser Ser Cys Ser His Glu Ser
 180 185 190

<210> 1138
 <211> 177
 <212> PRT
 <213> Pinus radiata

<400> 1138
 Leu Asp Tyr Met Glu Glu Gln Asn Trp Asp Ile Asn Gly Ala Lys Tyr
 1 5 10 15
 Asp Gly Ser Glu Lys Trp Lys Ala His Ser Ser Glu Gln Lys Asp Leu
 20 25 30
 Gly Thr Ile Pro Thr Lys Val Glu Gly Arg Ile Gly Asn Arg Glu Asn
 35 40 45
 Ser Leu Asp Val Thr Arg Gly Glu Ala Leu Trp Asp Ile Phe Arg Arg
 50 55 60
 Glu Asp Ile Pro Lys Leu Gln Asp Tyr Leu Leu Lys His Cys Gln Asp
 65 70 75 80
 Phe Arg His Ser Arg Asn Val Ser Val Asp Ser Val Val His Pro Ile

				85					90				95			
His	Asp	Gln	Thr	Phe	Tyr	Leu	Asn	Glu	Gly	His	Lys	Lys	Lys	Leu	Lys	
			100					105					110			
Glu	Glu	Tyr	Gln	Val	Glu	Pro	Trp	Thr	Phe	Glu	Gln	His	Leu	Gly	Glu	
		115					120					125				
Ala	Val	Phe	Ile	Pro	Ala	Gly	Cys	Pro	His	Gln	Val	Arg	Asn	Leu	Lys	
		130					135				140					
Ser	Cys	Ile	Lys	Val	Ala	Leu	Asn	Phe	Val	Ser	Pro	Glu	Asn	Leu	Gln	
145					150					155					160	
Glu	Cys	Ile	Arg	Leu	Glu	Asp	Glu	Leu	Arg	Leu	Leu	Pro	Lys	Asn	His	
				165				170						175		

Arg

<210> 1139
 <211> 148
 <212> PRT
 <213> Pinus radiata

<400> 1139

Gly	Pro	Arg	Glu	Met	Thr	Glu	Glu	Glu	Arg	Glu	Thr	Lys	Lys	Ala	Ala	
1				5					10					15		
Ser	Val	Ala	Ala	Thr	Ala	Ala	Asp	Gln	Glu	Leu	Arg	Lys	Lys	Val	Leu	
		20						25					30			
Arg	Asp	Leu	His	Ala	Leu	Ile	Asn	Pro	Asn	Ala	Thr	Gly	Glu	Ala	Asp	
		35					40					45				
Pro	Ala	Glu	Phe	Pro	Gly	Asp	Asp	Ala	Thr	Val	Asp	Gly	Glu	Val	Thr	
		50				55					60					
Asp	Ala	Glu	Trp	Phe	Tyr	Leu	Val	Ser	Met	Met	Lys	Ser	Phe	Gly	Asn	
65					70				75					80		
Gly	Leu	Gly	Val	Pro	Gly	Gln	Ala	Phe	Cys	Gly	Gly	Met	Pro	Ile	Trp	
				85					90					95		
Ile	Ile	Gly	Ser	Glu	Lys	Leu	Gln	Ser	Tyr	Asn	Cys	Glu	Arg	Ala	Arg	
			100					105					110			
Gln	Ala	Gln	Gln	Phe	Gly	Ile	Gln	Thr	Met	Val	Cys	Ile	Pro	Thr	Pro	
		115					120					125				
Asn	Gly	Val	Val	Glu	Leu	Gly	Ser	Thr	Asp	Leu	Asn	Pro	Gln	Asn	Trp	
		130				135					140					

Asp Leu Ile Gln
 145

<210> 1140
 <211> 341
 <212> PRT
 <213> Pinus radiata

<400> 1140

Met	Cys	Gly	Gly	Ala	Ile	Ile	Lys	Glu	Phe	Ile	Pro	Ala	Asn	Arg	Ser	
1				5					10					15		
Arg	Arg	Val	Thr	Ala	Arg	Glu	Leu	Trp	Pro	Asp	Phe	Asp	Thr	Phe	Ala	
		20						25					30			
Glu	Phe	Ile	Asn	Gly	Gly	Ala	Thr	Gln	Glu	Thr	Phe	Asn	Lys	Pro	Gly	
		35					40					45				
Lys	Leu	Asp	Glu	Gly	Cys	Lys	Gln	Lys	Ser	Lys	Pro	Ser	Lys	Gly	Ser	
		50				55					60					
Val	Lys	Thr	Gln	Gln	Glu	Phe	Cys	Ser	Gly	Phe	Glu	Gly	Gly	Arg	Ser	
65					70				75					80		
Glu	Val	Ile	Pro	Pro	Leu	Glu	Asp	Val	Glu	Gly	Ser	Thr	Pro	Thr	Ile	
				85					90					95		
Gly	Gly	Arg	Lys	Arg	Lys	Asn	Val	Tyr	Arg	Gly	Ile	Arg	Gln	Arg	Pro	
			100					105					110			

Trp Gly Lys Trp Ala Ala Glu Ile Arg Asp Pro Ser Lys Gly Val Arg
 115 120 125
 Val Trp Leu Gly Thr Phe Asn Thr Ala Glu Glu Ala Ala Lys Ala Tyr
 130 135 140
 Asp Ala Ala Ala Lys Arg Ile Arg Gly Lys Lys Ala Lys Leu Asn Phe
 145 150 155 160
 Ala Asp Asn Ser Cys Ser Val Lys Asn Asp Thr Ser Lys Lys Leu Ser
 165 170 175
 Gly Lys Lys Gly Lys Leu Cys Ser Lys His Pro Ala Leu Leu Leu Glu
 180 185 190
 Gly Phe Asn Ala Ser Cys Lys Val Lys Pro Ser Tyr Ser Ala Asn Pro
 195 200 205
 Asp Leu Leu Gly Gly Tyr Asn Ile Asn Arg Lys Val Lys Ala Ser Leu
 210 215 220
 Ser Gly Val Gly Lys Ser Asp Leu Thr Ile Cys Gly Tyr Asp Asp Met
 225 230 235 240
 Glu Tyr Gly Asp Ser Gly Phe Ser Lys Pro Ser Ala Pro Phe Gln Asn
 245 250 255
 Asn Ser Asn Ala Cys Thr Val Gln Phe Ser Glu His Ser Asn Leu Thr
 260 265 270
 Gln Thr Ser Gln Lys Ser Cys Ser Cys Glu Ile Cys Ser His Asn Tyr
 275 280 285
 Ser Glu Met Ser Asn Val Met Pro Pro Ala Tyr Gly Asn Ala Val Asn
 290 295 300
 Phe Glu Pro Val Gln Thr Ser Asn Pro Gly Gly Tyr Phe Asp Ser Asp
 305 310 315 320
 His Ser Ser Met Ser Phe Glu Gly Ala His Phe Pro Trp Ala Gln Glu
 325 330 335
 Ile Lys Thr Pro Glu
 340

<210> 1141

<211> 181

<212> PRT

<213> Pinus radiata

<400> 1141

Ala Lys Thr Leu His Pro Cys Trp Asp Ala Tyr Gln Leu Glu Asp Glu
 1 5 10 15
 Arg Ala Ser Ala Val Tyr Ile Asn Val Phe Ser Gly Asp Ala Thr Thr
 20 25 30
 Glu Phe Pro Ser Ala Leu Gln Leu Gly Arg Gly Gly Ile Leu Ala Asp
 35 40 45
 Ala Met Gly Leu Gly Lys Thr Val Met Thr Ile Ser Leu Leu Leu Ala
 50 55 60
 Asn Ser Gly Lys Gly Gly Phe Ser Gly Met Asp Thr Val Glu Pro Phe
 65 70 75 80
 Ser Ala Asn Ser Cys Ser Glu Lys Thr Ile Ile His Pro Tyr Asn Ile
 85 90 95
 Gly Val Glu Leu Gly Pro Ser Gln Tyr Thr Asn Lys Thr Gln Gly Thr
 100 105 110
 Ser Met Leu Arg Arg Ser Ser Ser Gly Leu His Lys Gly Gly Gly Asn
 115 120 125
 Leu Ile Val Cys Pro Met Thr Leu Leu Ser Gln Trp Lys Thr Glu Leu
 130 135 140
 Glu Thr His Val Gln Ser Gly Thr Met Ser Val Tyr Val His Tyr Gly
 145 150 155 160
 Gln Ser Arg Thr Lys Asp Val Lys Ser Leu Leu Gln His Asp Val Val
 165 170 175
 Leu Thr Thr Tyr Gly
 180

<210> 1142
 <211> 59
 <212> PRT
 <213> Pinus radiata

<400> 1142
 Met Phe Val Gly Met Met Ser Glu Val Gly Ser Pro Thr Ser Gln Asp
 1 5 10 15
 Ser Arg Asn Ser Glu Asp Gly Glu Arg Glu Asn Cys Ala Val Arg Glu
 20 25 30
 Gln Asp Arg Phe Met Pro Ile Ala Asn Val Ile Arg Ile Met Arg Lys
 35 40 45
 Val Leu Pro Thr His Ala Lys Ile Ser Asp Asp
 50 55

<210> 1143
 <211> 133
 <212> PRT
 <213> Pinus radiata

<400> 1143
 Met Gly Phe Glu Gln Thr Arg Gly Gly Gly Gly Gly Ala Lys Met Thr
 1 5 10 15
 Gln His Gln Val Thr Thr Glu Leu Val Arg Gln Ala Thr Glu Arg
 20 25 30
 Leu Arg Lys Leu Cys Arg Thr Gly Val Lys Val Glu Leu Arg Asp Phe
 35 40 45
 Phe Gln Leu Cys Ile Val Leu Ala Lys Ser Ile Asp Ser Ala Val Val
 50 55 60
 Tyr Asn Gln Ile Pro Thr Met Val His Glu Leu Pro Gln Leu Val Arg
 65 70 75 80
 Gln Val Phe Glu Arg Lys Asp Asp Ile Arg Leu Gln Pro Ala Ile Met
 85 90 95
 Val Leu Met Leu Ser Val Lys Asn Ala Cys Arg Ser Gly Trp Phe Arg
 100 105 110
 Val Thr Asp Thr Asp Glu Leu Leu Thr Met Ser Lys Glu Leu Ser Ser
 115 120 125
 Arg Phe Thr Ser Thr
 130

<210> 1144
 <211> 169
 <212> PRT
 <213> Pinus radiata

<400> 1144
 Met Thr Arg Lys Cys Ser His Cys Gly Asn Asn Gly His Asn Ser Arg
 1 5 10 15
 Thr Cys Pro Asn Arg Gly Gly Val Lys Leu Phe Gly Val Arg Leu Thr
 20 25 30
 Asp Gly Pro Ile Arg Lys Ser Ala Ser Met Gly Asn Leu Met Met Met
 35 40 45
 Ser Asn Pro Ser Ser Pro Ala Asp Pro Ser Glu Pro Ala Ser Ala Ala
 50 55 60
 Ala Ala Ala Ala Ala Ala Ala Ser Gly Tyr Leu Ser Asp Gly Leu
 65 70 75 80
 Val Glu Ala Ser Thr Ser Ser Asn Ser Arg Glu Arg Lys Lys Gly Val
 85 90 95
 Pro Trp Thr Glu Glu His Arg Met Phe Leu Leu Gly Leu Gln Lys
 100 105 110

Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asn Phe Val Ile Thr
 115 120 125
 Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr Phe Ile Arg
 130 135 140
 Gln Ser Asn Met Thr Arg Lys Lys Arg Arg Ser Ser Leu Phe Asp Met
 145 150 155 160
 Thr Pro Val Ser Phe Phe Phe Leu Ser
 165

<210> 1145
 <211> 103
 <212> PRT
 <213> Pinus radiata

<400> 1145
 Val Ser Ser Arg His Glu Phe Ala Val Ser Gln Met Ala Tyr Leu Gln
 1 5 10 15
 Ala Leu Arg Asn Ala Gly Ala Thr Leu Arg Gln Phe Ala Glu Leu Glu
 20 25 30
 Ser Met Glu Leu Gln Lys Thr Ser Pro Tyr Pro His Leu Arg His Tyr
 35 40 45
 Arg Val Thr Leu Pro Pro Ser Pro Pro Pro Leu Pro Pro Pro Pro
 50 55 60
 Pro Pro Pro Pro Leu Ser Leu Thr Pro Ser Pro Ser Tyr Gly Ser Ala
 65 70 75 80
 Thr Phe Pro Ser Ser Ile Pro Val Asn Arg Ser Ile Tyr Arg Cys Pro
 85 90 95
 Tyr Gln Gln Cys Ser Pro Ser
 100

<210> 1146
 <211> 153
 <212> PRT
 <213> Pinus radiata

<400> 1146
 Gln Leu Pro Asp Glu Ala Ile Ala Leu Ala Ala Ala Ser His Ile Glu
 1 5 10 15
 Arg Glu Leu Gln Ile Thr Ser Trp Asn Leu Ser Cys Asn Phe Val Ala
 20 25 30
 Ser Thr Leu Gln Gly Arg Glu Cys Ile Glu Arg Leu Glu Ile Thr Gly
 35 40 45
 Ile Gly Asp Pro Ser Gly Arg Gly Leu Gly Phe Ser Tyr Leu Arg Val
 50 55 60
 Ala Pro Lys Pro Pro Ile Ser Ser Ala Leu Val Lys Lys Lys Ala Ala
 65 70 75 80
 Ala Ala Arg Gly Gly Ser Ala Val Thr Gly Thr Asp Ala Asp Leu Arg
 85 90 95
 Arg Leu Ser Met Asp Ala Ala Arg Glu Val Leu Leu Lys Phe Asn Val
 100 105 110
 Asp Glu Glu Gln Ile Glu Lys Met Thr Arg Trp His Arg Ile Ala Met
 115 120 125
 Val Arg Lys Leu Ser Ser Glu Gln Ala Ala Ser Gly Val Lys Val Asp
 130 135 140
 Ala Thr Ala Leu Asn Lys Phe Ala Arg
 145 150

<210> 1147
 <211> 73
 <212> PRT
 <213> Pinus radiata

<400> 1147

Met Lys Ser Pro Ser Thr Ser Cys Leu Ser His Pro Val Glu Gly Glu
 1 5 10 15
 Gln Lys Ser Ile Asn Ser Glu Leu Trp His Ala Cys Ala Gly Pro Leu
 20 25 30
 Val Ser Leu Pro Ser Val Gly Ser Val Val Tyr Tyr Phe Pro Gln Gly
 35 40 45
 His Ser Glu Gln Val Ala Ala Ser Thr Gln Lys Val Ala Asp Thr His
 50 55 60
 Ile Pro Asn Tyr Pro Asn Leu Pro Tyr
 65 70

<210> 1148

<211> 213

<212> PRT

<213> Pinus radiata

<400> 1148

Leu Lys Val Gln Trp Asp Glu Ile Ser Ala Ile Ala Arg Pro Glu Arg
 1 5 10 15
 Val Ser Pro Trp Lys Leu Glu Pro Ser Leu Thr Pro Val Ala Val Asn
 20 25 30
 Pro Leu Pro Val Ala Arg Gly Lys Arg Pro Arg Pro Asn Ile Leu Pro
 35 40 45
 Ser Ser Ser Asp Leu Ser Val His Asp Lys Ala Pro Val Asp Ser Thr
 50 55 60
 Gln Val His Arg Phe Pro Arg Val Leu Gln Gly Gln Glu Val Met Thr
 65 70 75 80
 Leu Gly Gly Ser Leu Gly Asp Gly Glu Leu Glu Ser Gly Gln Lys Met
 85 90 95
 Val Ala Trp Gly Gly Ser Lys Leu Asp Asp Val Lys Ala Glu Gly Met
 100 105 110
 Gly Cys Gln Arg Arg Leu Val Ser Glu Asn Trp Met Pro Pro Leu Arg
 115 120 125
 His Asp Ser Leu Tyr Ser Asp Thr Phe Ser Ser Phe Gln Pro Val Gly
 130 135 140
 Glu Val Gln Glu Phe Arg Gly Ser Leu Thr Asn Ser Ile Leu Glu Asp
 145 150 155 160
 Gly Gln Gln Pro Lys Leu Ser Arg Lys Gln Phe Gln Asp Gln Glu Gly
 165 170 175
 Lys Ile Val Asp Gly Ser Gly Leu Trp Ser Met Ser Phe Pro Asn Ser
 180 185 190
 Leu Gln Leu Cys Glu Ser Asn Arg Lys Met Ser Ala Thr Ser Ala Ala
 195 200 205
 Gln Ser His Lys Gln
 210

<210> 1149

<211> 217

<212> PRT

<213> Pinus radiata

<400> 1149

Glu Leu Thr Ser Asp Ser His Arg Gln Ala Thr Leu Gln Leu Glu Ala
 1 5 10 15
 Glu Val Thr Ala Trp His Ile Ser Phe Cys Ser Leu Ile Lys Ser Gln
 20 25 30
 Gln Asp Tyr Ile Cys Ala Leu Tyr Glu Trp Ala Arg Leu Ser Leu Val
 35 40 45
 Gln Leu Gly Asn Glu Ala Gln Trp Glu Arg Gly Asn Arg Pro Pro Ile

50					55					60						
Tyr	Thr	Leu	Cys	Asp	Val	Trp	Gln	Gln	Val	Leu	Lys	Arg	Leu	Pro	Asp	
65					70					75					80	
Lys	Val	Ala	Ser	Glu	Ser	Ile	Lys	Ser	Phe	Ile	Ser	Val	Val	His	Ala	
				85					90					95		
Ile	Val	Met	Gln	Gln	Ala	Asp	Glu	Gln	Lys	Arg	Lys	Lys	Lys	Ala	Glu	
			100					105					110			
Asn	Ile	Ser	Arg	Glu	Leu	Gln	Lys	Lys	Met	Ile	Ala	Leu	Arg	Asn	Ile	
		115					120					125				
Glu	Lys	Lys	Tyr	Tyr	Ser	Ser	Tyr	Ser	Ile	Pro	Ala	Arg	Ala	Asp	Ala	
130						135				140						
Thr	Thr	Glu	Ser	Gln	Phe	Glu	Leu	Gly	His	Thr	Asp	Pro	Leu	Ala	Glu	
145				150					155						160	
Lys	Arg	Ala	Glu	Ile	Glu	Ile	Tyr	Lys	Arg	Arg	Leu	Glu	Asp	Glu	Lys	
			165					170					175			
Ala	Asn	Tyr	Ser	Lys	Ser	Ala	Arg	Gly	Thr	Arg	Glu	Met	Thr	Leu	Asn	
		180					185					190				
Asn	Ile	Gln	Thr	Gly	Leu	Pro	Gly	Leu	Phe	Gln	Ala	Leu	Ser	Ser	Phe	
		195					200					205				
Ser	Ser	Val	Cys	Ala	Ser	Ser	Phe	Glu								
210						215										

<210> 1150
 <211> 33
 <212> PRT
 <213> Pinus radiata

<400> 1150																
Met	Ala	Met	Gly	Glu	Ala	Glu	Arg	Ile	Thr	Gly	Pro	Trp	Ser	Pro	Glu	
1			5						10					15		
Glu	Asp	Thr	Ser	Leu	His	Lys	Leu	Val	Glu	Lys	Ser	Gly	Pro	Arg	Asn	
			20					25					30			

Trp

<210> 1151
 <211> 127
 <212> PRT
 <213> Pinus radiata

<400> 1151																
Trp	Arg	Pro	Ala	Lys	Phe	Ala	Arg	Asn	Leu	Leu	Pro	Asn	Tyr	Phe	Lys	
1			5						10					15		
Pro	Asn	Asn	Phe	Ser	Ser	Phe	Gly	Arg	Gln	Leu	Asn	Thr	Tyr	Gly	Phe	
		20					25					30				
Arg	Lys	Ile	Val	Pro	Asp	Arg	Trp	Glu	Phe	Ser	Asn	Glu	Phe	Phe	Arg	
		35					40					45				
Lys	Gly	Glu	Lys	Gln	Leu	Leu	Ser	Glu	Ile	His	Arg	Arg	Lys	Gly	Leu	
	50				55					60						
Ile	Gln	Pro	Pro	Pro	Pro	Pro	Glu	Asn	Arg	Ser	Ile	Ser	Pro	Ser	Asn	
65					70				75						80	
Ser	Gly	Asp	Glu	Gln	Thr	Trp	Ser	Ser	Thr	Ser	Ser	Pro	Asn	Ser	Ser	
			85					90					95			
Thr	Gly	Val	Asp	Ala	Leu	Ser	His	Lys	Asn	Ala	Ile	Glu	Glu	Asn	Glu	
			100					105					110			
Lys	Leu	Arg	Lys	Glu	Asn	Leu	Leu	Val	Ser	Glu	Leu	Thr	Gln			
		115					120					125				

<210> 1152
 <211> 104
 <212> PRT

<213> Pinus radiata

<400> 1152

```

Pro His Gly Leu Gln His His Ser Ser Asp Asp Ala Asn Gly Asp Gly
 1          5          10          15
Asp Lys Arg Ile Gly Val Glu Thr Gly Ser Ser Val Cys Pro Glu Leu
 20          25          30
Trp His Ala Cys Ala Gly Pro Leu Ile Ser Leu Pro Pro Lys Gly Ser
 35          40          45
Arg Val Val Tyr Phe Pro Gln Gly His Leu Glu Gln Ile Ala Asp Asn
 50          55          60
Glu Leu His Arg Gly Gly Arg Gly Ser Phe Leu Asn Ile Asn His Ala
 65          70          75          80
Ala Ala Pro Met Ala Glu Glu Ala Ser Ser Ala Ala Ala Leu Asn Ile
 85          90          95
Pro Pro Ser Phe Ile Ser Gln Pro
100

```

<210> 1153

<211> 146

<212> PRT

<213> Pinus radiata

<400> 1153

```

Glu Thr Leu Thr Leu Leu Lys Ile Arg Ser Glu Met Asp Ser Lys Phe
 1          5          10          15
Arg Glu Ala Thr His Lys Gly Pro Leu Trp Asp Glu Val Ser Arg Ala
 20          25          30
Leu Ala Glu His Gly Tyr Gln Arg Ser Ser Lys Lys Cys Arg Glu Lys
 35          40          45
Phe Glu Asn Leu Tyr Lys Tyr Tyr Lys Lys Thr Lys Glu Gly Lys Ala
 50          55          60
Gly Arg Gln Asp Gly Lys His Tyr Arg Phe Phe Ser Gln Leu Glu Ala
 65          70          75          80
Leu Tyr Gly Gly Thr Thr Ile Asp Ala Ala Asp Ser Cys Phe Gly Val
 85          90          95
Thr Thr Arg Thr Asn Leu Thr Glu Ser Pro Gly Leu Asp Phe Asn Gly
100          105          110
Asp Gly Ala Ser Gln Lys Tyr Ala Asp Thr His His Asn Ser Glu Gly
115          120          125
Phe Ser Leu Ser Ser Asp Ser Ser Ser Asp Asp Glu Tyr Ser His Asp
130          135          140
Ile Gln
145

```

<210> 1154

<211> 105

<212> PRT

<213> Pinus radiata

<400> 1154

```

Ile Phe Tyr Arg Leu His Cys Asn Leu Gly Glu Lys Ser Asn Lys Ile
 1          5          10          15
Tyr Ile Cys Leu Phe Thr Met Glu Leu Ala Asp Glu His Ser Ile Leu
 20          25          30
Arg Tyr Lys Lys Pro Lys Leu Ser Lys Asn Val Val Ser Glu Arg Arg
 35          40          45
Arg Arg Gln Lys Met Asn Lys Leu Leu Tyr Thr Leu Arg Ala Leu Val
 50          55          60
Pro Asn Ile Ser Lys Met Asp Lys Ala Ser Ile Leu Ala Asp Ala Ile
 65          70          75          80

```

Glu Tyr Val Glu Lys Leu Lys Gln Gln Val Glu Arg Ala Glu Ser Asp
 85 90 95
 Val Gln Ser Thr Asn Val Ser Ala Leu
 100 105

<210> 1155
 <211> 83
 <212> PRT
 <213> Pinus radiata

<400> 1155
 Arg Glu Phe Asn Ile Asn Ala Asp Val Tyr Ala Gln Asp Ser Ile Glu
 1 5 10 15
 Leu Leu Lys Gln Ser Gly Ile Asp Phe Glu Lys Asn Glu Glu Lys Gly
 20 25 30
 Ile Asp Ser His Arg Phe Gly Glu Leu Leu Met Ser Ser Gly Val Val
 35 40 45
 Leu Asn Glu Asn Val Asn Trp Ile Thr Phe His Ser Gly Tyr Asp Phe
 50 55 60
 Gly Tyr Leu Leu Lys Leu Leu Thr Cys Gln Asn Leu Pro Pro Glu Glu
 65 70 75 80
 Ser Asp Phe

<210> 1156
 <211> 170
 <212> PRT
 <213> Pinus radiata

<400> 1156
 Met Ala Asn Arg Ser Leu Trp Gly Gly Ser Asp Phe Asp Tyr Glu Asn
 1 5 10 15
 Glu Ala Asp Thr Arg Lys Gly Pro Trp Thr Val Glu Glu Asp Met Gln
 20 25 30
 Leu Gly Ile Val Asn Leu His Gly Glu Gly Arg Trp Asn Phe Leu Ala
 35 40 45
 Arg Ala Ser Gly Leu Gln Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp
 50 55 60
 Val Asn Tyr Leu Arg Pro Asp Leu Lys Arg Ser Lys Ile Thr Pro Glu
 65 70 75 80
 Glu Glu Arg Leu Ile Ile Glu Leu His Arg Arg Trp Gly Asn Arg Trp
 85 90 95
 Ser Arg Ile Ala Gln Ser Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys
 100 105 110
 Asn Phe Trp Arg Thr Arg Met Lys Gly Lys Leu Asn Ser Glu Thr Gln
 115 120 125
 Lys Asp Ile Ala Gly Val Asp Ala Asp Asp Gly Val Gln Phe Glu Ser
 130 135 140
 Glu Leu Gly Ser Cys Arg Leu Pro Val Ile Ser Ser His Ala Leu Pro
 145 150 155 160
 Glu Val Asp Val Ala Glu Pro Ser Ser Thr
 165 170

<210> 1157
 <211> 119
 <212> PRT
 <213> Pinus radiata

<400> 1157
 Gly Thr Val Gly Arg Lys Arg Arg Arg Ile His Arg Ser Ser Ile Gly
 1 5 10 15

Val Thr Gly Gly Arg Gly Leu Arg His Phe Ser Met Lys Val Cys Lys
 20 25 30
 Lys Val Glu Ser Lys Gly Trp Thr Thr Tyr Asn Glu Val Ala Ser Glu
 35 40 45
 Leu Val Ala Glu Phe Val Asn Pro Asn Ser Thr His Leu Ser Gln Asp
 50 55 60
 Gln Gln Gln Phe Asp Glu Lys Asn Ile Arg Arg Arg Val Tyr Asp Ala
 65 70 75 80
 Leu Asn Val Leu Met Ala Met Asp Ile Ile Ser Lys Glu Lys Lys Glu
 85 90 95
 Ile Arg Trp Lys Gly Leu Pro Thr Thr Asn Leu Ser Asp Ile Glu Arg
 100 105 110
 Leu Lys Thr Glu Arg Lys Arg
 115

<210> 1158
 <211> 97
 <212> PRT
 <213> Pinus radiata

<400> 1158
 Cys Pro Arg Ala Phe Ala Arg Ala Tyr Asn Leu Lys Thr His Met Ala
 1 5 10 15
 Thr His Asp Pro Asn Arg Leu Lys Pro His Val Cys Pro His Arg Ser
 20 25 30
 Cys Ala Arg Ser Phe Ser Arg Lys His Asp Leu Gly Arg His Leu Val
 35 40 45
 Ser Ile His Arg Asp Asp Ser Val Val Ser Thr Pro Ser Ala Ser Met
 50 55 60
 Lys Ser Ile Gly Val Asp Ser Gly Arg Arg Ser Trp Cys Asp Asn Cys
 65 70 75 80
 Gly Lys Gly Thr Ile Gly Ala Ser Cys Gln Cys Ser Cys Ala Asp Ile
 85 90 95
 Lys

<210> 1159
 <211> 162
 <212> PRT
 <213> Pinus radiata

<400> 1159
 His Ala Pro Ile Phe Cys Arg Val Ala Arg Asn Phe Gln Leu Arg Val
 1 5 10 15
 Ile Leu Lys Glu Asn Arg Arg Arg Glu Thr Phe Asp Gly Phe Leu Arg
 20 25 30
 Glu Asp His Glu Lys Val Ser Gln Leu Val Thr Gln His Tyr Lys Val
 35 40 45
 Gln Leu Glu Thr Lys Glu Ile Ser Val Lys Gly Trp Asn Trp Gly Ser
 50 55 60
 Thr Asp Val Gln Gly Asn Asp Leu Ala Phe Val Val Ala Asn Arg Thr
 65 70 75 80
 Ala Phe Glu Val Pro Leu Arg Ser Ile Thr Asn Ser Asn Ile Ala Gly
 85 90 95
 Arg Thr Glu Val Ser Leu Glu Phe Ser Thr Ala Pro Ala Pro Ser Ala
 100 105 110
 Ser Lys Ser Lys Lys Gly Arg Pro Asp Glu Leu Thr Glu Ile Arg Phe
 115 120 125
 Tyr Val Pro Gly Thr His Thr Lys Asp Asp Asp Asp Glu Ala Asp Ile
 130 135 140
 Thr Lys Asp Asp Glu Glu Val Ser Ala Ala Gln Ala Phe His Asp Met

145
Ile Lys

150

155

160

<210> 1160
<211> 163
<212> PRT
<213> Pinus radiata

<400> 1160
Gly Ser Gly Gly Val Lys Met Glu Asp His Ser Pro Val Ile Ile Asn
1 5 10 15
Ser Gln Ser Gly Tyr Cys Gln Ser Gln Gln Ser Ser Gln Met Pro Leu
20 25 30
Ala Gly Tyr Met Ser Pro His Gly Ile Pro Ile Gln His Thr Asp Asp
35 40 45
Ala Ala Ser Lys Glu Thr Gln Tyr Leu Arg Arg Arg Cys Phe Asn Cys
50 55 60
His Thr Thr Glu Pro Pro Ser Trp Arg Arg Ser Thr Leu Thr Pro Gly
65 70 75 80
Lys Ile Val Cys Asn Lys Cys Gly Leu Tyr Glu Arg Thr His Leu Arg
85 90 95
Pro Arg Pro Leu Arg Phe Asp Glu Leu Arg Ala Gly Asn Lys Ser Arg
100 105 110
Lys Gln Thr Lys Ser Ser Pro Lys Gly Ala Lys Val Ile Pro Pro Gly
115 120 125
Pro Leu Pro Ile Lys Lys Glu Pro Ala Glu Met Glu Ala Ile Ser Arg
130 135 140
Arg Met Ser Val Ser Ser Ser Ser Ala Gln Ser Gly Gly Gly Gly
145 150 155 160
Ser Ser Asp

<210> 1161
<211> 148
<212> PRT
<213> Pinus radiata

<400> 1161
Arg Asn Leu Leu Gly Ala Arg Ala Gln Pro Met Lys Leu Ser Ala Lys
1 5 10 15
Asn Asp Ser Lys Leu Gly Ile Ala Arg Pro Ala Lys Leu Tyr Arg Gly
20 25 30
Val Arg Gln Arg His Trp Gly Lys Trp Val Ala Glu Ile Arg Leu Pro
35 40 45
Arg Asn Arg Thr Arg Leu Trp Leu Gly Thr Phe Asp Thr Ala Glu Glu
50 55 60
Ala Ala Phe Ala Tyr Asp Thr Ala Ala Tyr Gln Leu Arg Gly Glu Tyr
65 70 75 80
Ala Arg Leu Asn Phe Pro Asp Leu Arg Tyr Leu Leu Leu Ser Asn Ser
85 90 95
Asp Asn Gly Ser His Asn Val Leu Ser Pro Pro Gly Asn Ala Leu Ser
100 105 110
Val Leu Lys Ser Ser Val Asp Ala Lys Leu Gln Ala Ile Cys Gln Arg
115 120 125
Leu Ser Gln Glu Asn Ser Ser Glu Asn Arg Leu Met Ala His Ser Ala
130 135 140
Asn Asn Glu Ala
145

<210> 1162

<211> 48
 <212> PRT
 <213> Pinus radiata

<400> 1162
 Phe Leu Glu Ala Leu Glu Lys Arg Glu Glu Asp Arg Met Met Arg Glu
 1 5 10 15
 Glu Ala Trp Lys Arg Gln Glu Met Ala Arg Leu Asn Lys Asp Gln Glu
 20 25 30
 Leu Arg Ser Gln Glu Arg Ser Met Ala Ala Ser Arg Asp Leu Ala Leu
 35 40 45

<210> 1163
 <211> 255
 <212> PRT
 <213> Pinus radiata

<400> 1163
 Val Ala Leu Ser Asn Asn Pro Leu Ile Phe Ser Ala Lys Val Glu Asn
 1 5 10 15
 Gly Thr Pro Ser Tyr Asp Gly Leu Lys His Ala Asn Thr Asn Pro Met
 20 25 30
 Pro Phe Ser Gly Leu Gly Asn Val Ser Met Gly Pro Leu Phe Tyr Gln
 35 40 45
 Ala Asn Pro Ile Gln Arg Val Lys Arg Val Arg Asp Thr Ser Phe Ile
 50 55 60
 Met Gly Pro Pro Ser Ser Pro Phe Gly Arg Met Gly Val Asn Gly His
 65 70 75 80
 Met Gly Met Asn Asp Val Ser Lys Ser Leu Gln Pro Gly Phe Lys Ala
 85 90 95
 Arg Val Pro Tyr Pro Leu Gln Ala Ala Arg Ser Asp Ser Phe Val Ala
 100 105 110
 Gln Gly Cys Phe Pro Tyr Asp Pro Asn Leu Ser Ser Thr Ser Asn Leu
 115 120 125
 Pro Leu Gly Gly Phe Ser Ser Gly Ser His Ala Val Met Asn Gly Thr
 130 135 140
 Phe Ser Ser Ser Arg Leu Phe Ser Gly Gln Lys Leu Glu Leu Pro Ser
 145 150 155 160
 Ser Gln Phe Ala Glu Ser Val Gln Thr Ala Gly Ser Ser Ile Asn Pro
 165 170 175
 Val Leu Asn Arg Ser Thr Pro Leu Leu Leu Pro Pro Val Pro Thr Gln
 180 185 190
 Thr Ile Asn Gln Val Asp Tyr Ser Phe Ser Thr Pro Lys Asn Ser Gly
 195 200 205
 Leu Leu Glu Ser Met Phe Gln Glu Ala Gln Thr Met Gly Gly Val Lys
 210 215 220
 Ala His Ser Ser Ser Asn Ser Ser Ile Asp Leu Gln Gly Gly Ser Lys
 225 230 235 240
 Ser Ser Ile Ser Asn Pro Leu Asn Asn Gly Phe Leu Cys Arg Ser
 245 250 255

<210> 1164
 <211> 147
 <212> PRT
 <213> Pinus radiata

<400> 1164
 Ile Arg Met Glu Glu Pro Leu Gln Ile Ile Asn Ser Ser Pro Ile Gln
 1 5 10 15
 Gln Gln His Asp His Asp Asp Asp Asp His Gly His Gly His Glu Glu
 20 25 30

Glu Val Ile Pro His Pro Leu Leu Pro Pro Pro Gly Asp Thr Cys Ile
 35 40 45
 Val Pro Tyr Ile Met Pro Val Ser Thr Ser Thr Ala Glu Lys His Pro
 50 55 60
 Pro Gln Pro Thr Asn Ile Ala Phe Asn Gly Pro Glu Thr Glu Glu Asp
 65 70 75 80
 Asp Lys Lys Arg Asp Arg Glu His Lys Lys Arg Ser Lys Asn Trp Thr
 85 90 95
 Arg Val Glu Thr Leu Lys Leu Ile Lys Leu Arg Thr Glu Phe Glu Pro
 100 105 110
 Arg Phe Ser Arg Ser Gly Arg Lys Thr Glu Leu Trp Asp Glu Ile Ala
 115 120 125
 Glu Ser Leu Arg Lys Glu Gln Phe Phe Arg Asp Ala Gln Cys Arg
 130 135 140
 Asp Lys Trp
 145

<210> 1165
 <211> 202
 <212> PRT
 <213> Pinus radiata

<400> 1165
 Met Asp Gln Gln Gln Pro Thr Ile Pro Ala Leu Pro Gln Val Gly Tyr
 1 5 10 15
 Gly Thr Asn Pro Tyr Ile Ala Pro Pro Ile Gly Gly Pro Pro His Pro
 20 25 30
 Gln Leu Ala Ser Tyr His Gln Gln Leu Gln Ala Phe Trp Gly Asn Gln
 35 40 45
 Met Arg Glu Val Glu Gln Ala Gln Asp Phe Lys Thr His Ser Leu Pro
 50 55 60
 Leu Ala Arg Ile Lys Lys Ile Met Lys Ala Asp Glu Asp Val Lys Met
 65 70 75 80
 Ile Ser Ala Glu Ala Pro Val Val Phe Ala Lys Ala Cys Glu Met Phe
 85 90 95
 Ile Leu Glu Leu Thr Leu Arg Ser Trp Ile His Thr Glu Glu Asn Lys
 100 105 110
 Arg Arg Thr Leu Gln Lys Asn Asp Ile Ala Ala Ala Ile Gly Arg Thr
 115 120 125
 Asp Ile Phe Asp Phe Leu Val Asp Ile Val Pro Arg Asp Glu Phe Lys
 130 135 140
 Asp Glu Gly Leu Val Ile Pro Arg Ala Ala Gly Ala Val Pro Phe Met
 145 150 155 160
 Gly Pro Gly Asp Asn Val Pro Ser Tyr Tyr Tyr Val Ala Gln Gln Ala
 165 170 175
 Pro Asn Val Ala Ala Tyr Ala Pro Pro Thr Gln Gln Met Arg Ser Lys
 180 185 190
 Ala Pro Ala Pro Pro Pro His Gly Ser Ser
 195 200

<210> 1166
 <211> 143
 <212> PRT
 <213> Pinus radiata

<400> 1166
 Gln Gly Ser Leu Thr Leu Pro Arg Thr Leu Ser Arg Arg Thr Val Asp
 1 5 10 15
 Asp Val Trp Arg Glu Ile His Lys Glu Asn Ile Asp Gly Asn Gly Asn
 20 25 30
 Ala Pro Ala Asn Gln Ala Arg Gln Pro Thr Phe Gly Glu Met Thr Leu

		35					40				45				
Glu	Asp	Phe	Leu	Val	Lys	Ala	Gly	Val	Val	Arg	Glu	Asp	Ala	Glu	Gln
	50					55					60				
Gly	Asp	Gly	Gln	Ser	Phe	Gly	Ala	Phe	Arg	Asn	Ala	Leu	Asp	Gly	Glu
65					70					75					80
Phe	Val	Ala	Asn	Leu	Ala	Glu	Arg	Asn	Gly	Asp	Asn	Arg	Leu	Gly	Ile
			85						90					95	
Gly	Asn	Ser	Leu	Gly	Leu	Gly	Phe	Gly	Glu	Arg	Gly	His	Arg	Asn	Gly
			100					105					110		
Glu	Val	Gly	Ser	Asn	Lys	Ser	Gly	Ala	Gly	Gly	Val	Pro	Gly	Leu	Ser
		115					120					125			
Leu	Ser	Pro	Thr	Asn	Val	Phe	Leu	Ile	Met	Leu	Pro	Trp	Ile	Trp	
	130					135					140				

```
<210> 1167
<211> 90
<212> PRT
<213> Pinus radiata
```

<400> 1167															
Phe	Gln	Arg	Arg	Lys	Lys	Lys	Ser	Ile	Gly	Arg	Gly	Cys	Leu	Lys	Thr
1				5					10					15	
Ser	Ile	Asn	Asp	Val	Glu	Gln	Leu	Lys	Ala	Glu	Lys	Leu	Leu	Leu	Lys
			20					25					30		
Ser	Arg	Ile	Glu	Lys	Lys	Ala	Ser	Tyr	Phe	His	Glu	Leu	Glu	Glu	Gln
		35					40					45			
Ile	Ile	Gly	Leu	Gln	Asn	Leu	Val	Lys	Arg	Asn	Glu	His	Arg	Tyr	Ser
	50					55				60					
Ser	Gly	Asn	Thr	Pro	Ser	Gly	Gly	Val	Ser	Leu	Pro	Phe	Ile	Leu	Val
65				70						75					80
Gln	Thr	His	Pro	Arg	Ala	Thr	Val	Glu	Ile						
				85					90						

```
<210> 1168
<211> 105
<212> PRT
<213> Pinus radiata
```

<400> 1168															
Gly 1	Ile	Arg	Arg	Ala 5	Thr	Arg	Gln	Lys	Ser 10	Gly	Ile	Leu	Ser	Ser 15	Val
Leu	Ser	Asn	Gln	Asn 20	Ala	His	Leu	Ser 25	Val	Leu	Ala	Ala	Ala 30	Ala	Ser
Ala	Val	Ala 35	Thr	Lys	Ser	Met	Phe 40	His	Val	Phe	Tyr	Asn 45	Pro	Arg	Thr
Ser	Pro 50	Ala	Glu	Phe	Ile 55	Ile	Pro	Tyr	Gln	Lys	Tyr 60	Val	Lys	Ser	Cys
Lys 65	Gln	Pro	Leu	Ser 70	Ile	Gly	Met	Arg	Phe 75	Lys	Met	Arg	Phe	Glu 80	Thr
Glu	Asp	Thr	Ala 85	Glu	Arg	Arg	Tyr	Thr	Gly 90	Met	Ile	Thr	Ala	Ile 95	Gly
Asp	Ala	Asp	Pro 100	Ala	Arg	Trp	Pro	Gly 105							

```
<210> 1169
<211> 106
<212> PRT
<213> Pinus radiata
```

<400> 1169
Gln Asp Thr His Ser Glu Pro Met Ala Met Glu Met Gly Leu Val Ile


```

      1           5           10           15
Asp Gly Asp Arg Phe Ser Ser Glu Gly Asp Gly Asp Ile Met Leu Asp
      20           25           30
Gly Glu Asp Leu Leu Pro Glu Ile Asn Asp Met Phe Trp Glu Gln Phe
      35           40           45
Leu Ala Glu Ser Ala Thr Ser Gly Gly Thr Glu Glu Ala Glu Ser Ala
      50           55           60
Ala Gln Glu Ser Leu Thr Lys Asp Gln Asp Glu Lys Pro Ser Glu Asn
      65           70           75           80
Gly Asn Trp Trp Lys Lys Asn Gln Asn Met Asp Asn Leu Thr Glu Gln
      85           90           95
Met Gly Gln Leu Ala Ser Glu Ser Asn Pro
      100           105

```

<210> 1170
 <211> 144
 <212> PRT
 <213> Pinus radiata

```

      <400> 1170
Asp Gly Ala Val Arg Asp Ala Gly Arg Leu Val Pro Ala Pro Phe Leu
      1           5           10           15
Val Lys Met Tyr Arg Leu Val Asp Asp Pro Ser Thr Asn His Ile Val
      20           25           30
Ser Trp Gly Glu Asn Asn Asn Ser Phe Val Val Trp Arg Pro Lys Glu
      35           40           45
Phe Ser Ala Ser Val Leu Pro Cys Tyr Phe Asn His Ala Asn Phe Ser
      50           55           60
Ser Phe Val Arg Gln Leu Asn Asn Tyr Gly Phe Arg Lys Thr Phe Arg
      65           70           75           80
Gly Gln Cys Glu Phe Ser Asn Lys Leu Phe Glu Lys Gly Lys Gln Tyr
      85           90           95
Leu Leu Cys His Ile His Arg Arg Arg Ala Ser Asn Ser Ser Pro Met
      100           105           110
Pro Met Glu Tyr Gly Lys Ser Ser Leu Leu Phe Pro Ile Ile Leu Pro
      115           120           125
Thr Gln His Ser Asn Val Leu Ala Ala Pro Leu Pro Ser Ser Leu Ser
      130           135           140

```

<210> 1171
 <211> 62
 <212> PRT
 <213> Pinus radiata

```

      <400> 1171
Lys Glu Arg Ile Leu Thr Glu Glu Asn Leu Phe Leu Arg Lys Lys Cys
      1           5           10           15
Gly Asp Glu His Val Asp Cys Ser Ala Phe Arg Thr Pro Pro Ala Gln
      20           25           30
Leu Arg Ser Ile Gln Asn Ile Asp Val Glu Thr Gln Leu Val Ile Arg
      35           40           45
Pro Pro Thr Val Gln Gln His Pro Asp Val Asp Ser Pro Arg
      50           55           60

```

<210> 1172
 <211> 88
 <212> PRT
 <213> Pinus radiata

```

      <400> 1172
Asp Pro Asn Ala Pro Lys Lys Ala Met Thr Gly Phe Met Phe Phe Ser

```

```

      1           5           10           15
Gln Val Glu Arg Glu Asn Leu Lys Lys Ser Asp Pro Gly Met Ala Phe
      20           25           30
Thr Asp Val Gly Arg Thr Leu Gly Glu Arg Trp Lys Lys Met Ser Ala
      35           40           45
Glu Glu Lys Ala Pro Tyr Glu Ser Lys Ala Arg Ala Asp Lys Glu Arg
      50           55           60
Tyr Lys Glu Ala Met Ala Asp Tyr Lys Ser Gly Pro Thr Asn Val Asp
      65           70           75           80
Ser Gly Asn Glu Ser Asp Ser Glu
      85

```

```

<210> 1173
<211> 106
<212> PRT
<213> Pinus radiata

```

```

      <400> 1173
Leu Leu Phe Gly Val Asn Ile Asp Ser Ser Ser Leu Ile Val Pro Asn
      1           5           10           15
Thr Val Ser Asn Met Arg Ser Ile Gly Ser Ser Thr Asp Ala Val Met
      20           25           30
Gln Phe Gly Val Ser Asn Tyr Leu Asn Ala Pro Pro Cys Ala Ser Gly
      35           40           45
Ser Asn Ile Ser Leu Asn Ser Asp Ile Ser Ala Ser Ala Cys Leu Asp
      50           55           60
Glu Ser Gly Leu Leu Pro Ala Glu Asn Leu Gly Gln Met Asn Ala
      65           70           75           80
Pro Thr Arg Thr Phe Ile Lys Val Tyr Lys Gln Gly Ser Val Gly Arg
      85           90           95
Ser Leu Asp Ile Ser Arg Phe Ser Ser Tyr
      100           105

```

```

<210> 1174
<211> 108
<212> PRT
<213> Pinus radiata

```

```

      <400> 1174
Met Ala Thr Thr Arg His Gln Arg Ser Pro Asp Ser Ser Pro Arg Ser
      1           5           10           15
Glu Asp Glu Ser Gly Ala His Thr Tyr Ser Asn Gln Asp Gly Ser Val
      20           25           30
Lys Glu Gln Asp Arg Phe Leu Pro Ile Ala Asn Val Ser Arg Ile Met
      35           40           45
Lys Lys Ala Leu Pro Ala Asn Ala Lys Ile Ser Lys Asp Ala Lys Glu
      50           55           60
Thr Val Gln Glu Cys Val Ser Glu Phe Ile Ser Phe Ile Thr Gly Glu
      65           70           75           80
Ala Ser Asp Lys Cys Gln Arg Glu Lys Lys Lys Thr Ile Asn Gly Asp
      85           90           95
Asp Leu Leu Trp Ala Met Gly Thr Leu Gly Phe Glu
      100           105

```

```

<210> 1175
<211> 137
<212> PRT
<213> Pinus radiata

```

```

      <400> 1175
Lys Ser Asp Tyr Arg Asp Ser Asp Asp Glu Gly Gly Gly Thr Val Arg

```

1				5					10					15			
Glu	Gly	Lys	Asp	Leu	Gln	Thr	Ser	Asn	Phe	Ile	Asp	Tyr	Phe	Gly	Gln		
			20					25					30				
Ser	Asn	His	Thr	Glu	Glu	Ala	Glu	Asn	Glu	His	Asp	Ala	Ser	Val	Asp		
		35					40					45					
Thr	Lys	Gly	Pro	Leu	Glu	Ser	Ser	Asn	Glu	Val	Gly	His	Pro	Thr	Thr		
	50					55					60						
Tyr	Pro	Glu	Ser	Ser	Ser	Leu	Ser	Ala	Gln	Gly	Ser	Glu	Pro	Arg	Val		
65					70					75					80		
Phe	Ser	Cys	Asn	Tyr	Cys	Gln	Arg	Lys	Phe	Tyr	Ser	Ser	Gln	Ala	Leu		
			85						90					95			
Gly	Gly	His	Gln	Asn	Ala	His	Lys	Arg	Glu	Arg	Thr	Leu	Ala	Lys	Arg		
			100					105						110			
Gly	Gln	Arg	Ile	Gly	Ala	Phe	Gln	His	Arg	Tyr	Ile	Ser	Met	Ala	Ser		
		115					120					125					
Leu	Pro	Leu	His	Gly	Ser	Thr	Glu	Ser									
	130					135											

<210> 1176

<211> 206

<212> PRT

<213> Pinus radiata

<400> 1176

Ser	Arg	Gly	Lys	Ala	Leu	Lys	Leu	Phe	Gly	Phe	Glu	Phe	Arg	Gly	Ser		
1				5					10					15			
Glu	Gly	Gly	Ser	Phe	Glu	Gly	Thr	Asn	Gly	Ser	Asp	Gln	Pro	Gln	Asp		
			20					25				30					
Gly	Thr	Asn	Ile	Leu	Thr	Ala	Gly	Glu	Ala	Ser	Thr	Glu	Pro	Val	Glu		
		35				40					45						
Glu	Glu	Leu	Val	Ile	Glu	Ala	Lys	Asn	Gly	Asp	Ser	Gly	Lys	Leu	Glu		
	50					55				60							
Asp	Val	Gly	Ser	Pro	Val	Glu	Ala	Gly	Glu	Ser	Gly	Ser	Thr	Ser	Asn		
65					70					75					80		
Cys	Leu	Gly	Ser	Ser	Ala	Gln	Glu	Asn	Arg	Lys	Tyr	Glu	Cys	Gln	Tyr		
			85						90					95			
Cys	Cys	Arg	Glu	Phe	Ala	Asn	Ser	Gln	Ala	Leu	Gly	Gly	His	Gln	Asn		
			100					105						110			
Ala	His	Lys	Lys	Glu	Arg	Gln	Gln	Ala	Lys	Arg	Ala	His	Leu	Leu	Ala		
		115				120						125					
Thr	Arg	Ser	Ala	Ala	Ala	Ser	Ala	Asn	Arg	Ser	Gly	Ala	Thr	Ala	Trp		
	130					135					140						
Cys	Gly	Asn	Ile	Asn	Gly	Asn	Leu	Tyr	His	Arg	Asn	Phe	Leu	Phe	Asn		
145					150					155					160		
Asn	Ser	Tyr	Phe	Thr	Arg	Met	Gln	Val	Phe	Gln	Glu	Asp	Phe	Pro	Thr		
			165						170					175			
Phe	Gln	Thr	Pro	Gln	Ala	Val	Ala	Ala	Pro	Ser	Ile	Pro	His	Tyr	Ile		
		180					185						190				
Phe	Ser	Tyr	Gln	Gln	Gln	Gln	Gln	Ala	Pro	Val	Gln	Ser	Arg				
	195						200					205					

<210> 1177

<211> 116

<212> PRT

<213> Pinus radiata

<400> 1177

Val	Pro	Glu	Asn	Ser	Lys	Gln	Ile	Ile	Asn	His	Gly	Leu	Ile	Leu	Pro		
1				5					10					15			
Glu	Met	Gly	Ser	Val	Asp	Ser	Gly	Arg	Glu	Gly	Thr	Arg	Ala	Ile	Leu		
			20					25					30				

Ser Asp Asp Cys Val Lys Phe Glu Cys Arg Tyr Cys Cys Arg Val Phe
 35 40 45
 Pro Thr Ser Gln Ala Leu Gly Gly His Gln Asn Ala His Lys Arg Glu
 50 55 60
 Arg Arg Arg Ala Met Thr Arg Phe Gln Arg Ser Pro Ser Asp Ser Ser
 65 70 75 80
 Asn Tyr Ser Gly Lys Gln Asn Ser Ile Asp Leu Phe Ser Arg Glu Arg
 85 90 95
 Val Pro Gly Ser Ser Leu Leu Ser Pro His Gly Thr Arg Asp His Val
 100 105 110
 Val Cys Ser Asp
 115

<210> 1178
 <211> 122
 <212> PRT
 <213> Pinus radiata

<400> 1178
 Lys Lys Ala Ser Glu Trp Gly Glu Ser Val Val Ser Thr Ser Glu Asn
 1 5 10 15
 Ser Asn Asp Leu Asp Pro Pro Thr Tyr Ser Glu Thr Ser Ser Pro Ala
 20 25 30
 Gln Gly Ser Asp Pro Arg Val Phe Pro Cys Asn Phe Cys Gln Ser Lys
 35 40 45
 Phe Tyr Ser Ser Gln Ala Leu Gly Gly His Gln Asn Ala His Lys Arg
 50 55 60
 Glu Arg Thr Leu Ala Arg Arg Ala Gln Arg Met Gly Ser Phe Ala Gln
 65 70 75 80
 Arg Tyr Ser Ser Met Ala Ser Leu Pro Leu His Gly Ser Ser Glu Thr
 85 90 95
 Ser Trp Thr Pro Ser Arg Phe Leu Gly Ile Lys Ala His Ser Leu Ile
 100 105 110
 His Lys Pro Phe Pro Glu Gly Asp Asn Leu
 115 120

<210> 1179
 <211> 113
 <212> PRT
 <213> Pinus radiata

<400> 1179
 Met Thr Gln Ala Thr Asn Tyr Thr Ala Gly Thr Ile Arg Asp Asp Gln
 1 5 10 15
 Glu Glu Gln Cys Val Arg Arg Gly Pro Trp Thr Val Asp Glu Asp Met
 20 25 30
 Ser Leu Ile Arg Cys Val Thr Thr Arg Gly Glu Gly Arg Trp Asn Thr
 35 40 45
 Val Ala Lys Phe Ala Gly Leu Lys Arg Thr Gly Lys Ser Cys Arg Leu
 50 55 60
 Arg Trp Leu Asn Tyr Leu Arg Pro Asp Val Lys Arg Gly Asn Ile Thr
 65 70 75 80
 Pro Glu Glu Gln Leu Leu Ile Leu Glu Leu His Arg Leu Trp Gly Asn
 85 90 95
 Arg Trp Ser Lys Ile Ala Arg Gln Leu Pro Gly Arg Thr Asp Asn Glu
 100 105 110
 Ile

<210> 1180
 <211> 76

<212> PRT

<213> Pinus radiata

<400> 1180

```

Met Arg Arg Pro Gln Arg Lys Lys Lys Thr Asp Ala Glu Asp Asp Phe
 1          5          10          15
Asp Glu Cys Tyr Tyr Thr His Met Cys Lys Ile Cys Lys Lys Phe
 20          25          30
Val Ser Gly Arg Ala Phe Gly Gly His Met Arg Ile His Gly Pro Val
 35          40          45
Ala Thr Ala Ala Ala Ala Ala Ala Glu Ser Asn Gly Lys Asn Leu Glu
 50          55          60
Pro Gln Arg Lys Arg Ser Arg Ala Glu Glu Ile Arg
 65          70          75

```

<210> 1181

<211> 130

<212> PRT

<213> Pinus radiata

<400> 1181

```

Val Gly Cys Lys Gly Ser Asp Ala Phe Glu Glu Ser Leu Lys His Phe
 1          5          10          15
Cys Arg Val Cys Lys Arg Arg Phe Ala Cys Gly Arg Ala Leu Gly Gly
 20          25          30
His Met Arg Val His Gly Ala Glu Leu Gly Ala Ile Lys Gly Gly Gly
 35          40          45
Leu Glu Glu Gln Phe Glu Lys Gly Arg Val Lys Glu Pro Ser Arg Ser
 50          55          60
Cys Gly Asp Ser Val Lys Glu Gly Val Gln Asp Glu Val Glu Gly Leu
 65          70          75
Asn Ser Met Tyr Thr Leu Arg Arg Asn Pro Lys Arg Ser Trp Arg Phe
 85          90          95
Ala Asp Gln Asp Tyr Ser Phe Ala Phe Gly Gly Val Asp Gly Ser Gly
 100          105          110
Ala Lys Arg Phe Gly Ser Thr Phe Leu Arg Asp Ser Arg Val Cys Glu
 115          120          125
Glu Cys
130

```

<210> 1182

<211> 86

<212> PRT

<213> Pinus radiata

<400> 1182

```

Arg Asn Tyr Leu Gly Glu Tyr Thr Gly Glu Leu Ile Ser His Arg Glu
 1          5          10          15
Ala Asp Lys Arg Gly Lys Ile Tyr Asp Arg Glu Asp Ser Ser Phe Leu
 20          25          30
Phe Asn Leu Asn Asp Gln Tyr Val Leu Asp Ala Tyr Arg Lys Gly Asp
 35          40          45
Lys Leu Lys Phe Ala Asn His Ser Pro Thr Pro Asn Cys Tyr Ala Lys
 50          55          60
Val Ile Met Val Ala Gly Asp His Arg Val Gly Ile Phe Ala Lys Glu
 65          70          75
Arg Ile Ala Ala Gly Glu
 85

```

<210> 1183

<211> 462

<212> DNA

<213> Eucalyptus grandis

<400> 1183

acaaacaaac	aaacaagacg	gaacgagatg	aagacggttc	agtcgaagaa	gttcaggggc	60
gtcagacagc	gtcactgggg	ctcttgggtt	tccgaaattc	gccatcctct	ggtgaagaga	120
aggggtgtgg	tgggcacgtt	cgagacggct	gaggaggcgg	cacgagccta	cgaccaggcc	180
gccatcttga	tgagtggcgg	caatgcaaag	accaacttcc	cgacatctca	aaccacgaac	240
ggcgaccccg	ccgctgccaa	ttccttgtct	tcctcgaagc	acttgtcgga	gatcctccac	300
gcgaantcaa	ganatgcagc	aagacgccgt	cgccatccct	cacctgccta	aggctcgaca	360
ctgagaactc	ccacatcgga	gtctggcaga	agggtgccgg	ccagcgtcag	actcaactgg	420
gtatgaccgt	acagtcggaa	caaaaatccg	atccattggt	ag		462

<210> 1184

<211> 340

<212> DNA

<213> Eucalyptus grandis

<400> 1184

gactccccct	atccccctct	tttctccctc	tcaagaatca	agagattact	atggaaagcg	60
aacgctacga	tgagacgaca	gaggggcagc	gaatcaagag	aaggccgcac	cagcagcagc	120
agcagcagca	gcagcggcgg	cagaagcctt	acaggggtat	ccggatgagg	aagtggggca	180
agtgggtggc	cgagatcagg	gagcccaaca	agcgtccccg	catctggctc	ggctcctatg	240
ccacccccgt	ggccgcgcgc	cgcgccctacg	acaccgccgt	cttctacctc	cgcgggccctc	300
ccgcccgcct	caacttcccc	gacctcatct	ggcgcgaggg			340

<210> 1185

<211> 190

<212> DNA

<213> Eucalyptus grandis

<400> 1185

cttgggggtg	acatggcgcg	acgtggcgga	ggaaggaggc	gaacggcggc	tccgaggcgt	60
ccgacgccgt	cttgccgcga	gtcatcatc	gccatcgta	caagggagtg	aggatgcgga	120
agtgggggaa	gtgggtggcg	gagatacggc	agcccaacag	ccgggaccgc	atctggctcg	180
gctcctacgc						190

<210> 1186

<211> 473

<212> DNA

<213> Eucalyptus grandis

<400> 1186

aacaaaggtn	tgtgtatgga	accattctgg	atagcattgc	aaaggttact	ggaattgtga	60
agtttgatct	gcatgctgag	ccagaggaag	gaaaaaagaa	gattgaggtc	ggaggaaatg	120
ttgcaggtgt	gtttgacctt	ggaccaggta	gaattnggtt	ctgaagctgt	ttttgtccct	180
cgagagcctg	gcatcacttc	tgaagaagat	gatgggtacc	tgatattctt	tgtccatgat	240
gaaagcacag	ggaagtcggc	agtaaatgta	attgatgcga	aaaacatgtc	atctgatcct	300
gttgctgtcg	ttgaattacc	ccataggggt	ccttatggct	tccatgcctt	cttcgtgact	360
gaggaacaac	ttcaggaact	ggctaagctg	taggtctcta	catgcacgaa	ttgttgggaa	420
tgcatgtgtt	gcgaggggag	gcatatctct	ggaaagctgc	tacagttgat	cta	473

<210> 1187

<211> 333

<212> DNA

<213> Eucalyptus grandis

<400> 1187

accagatcca	gatgcagagg	tcattgcact	atcgccaaag	acgctcatgg	cgacgaacag	60
gttcgtttgc	gagatatgca	acaaaggctt	ccagagggac	cagaacctgc	agctgcaccg	120
gagggggccac	aacctgccat	ggaagctccg	gcagaggagc	aaggagatcg	tcaagaagaa	180

ggtttatata	tgccctgaga	agacgtgcgt	gcaccacgac	ccttcaaggg	cacttggcga	240
cctcactggg	atcaagaagc	acttcagccg	gaagcatggc	gagaagaagt	ggaagtgtga	300
gaagtgcctg	aagaagtacg	cagtccagtc	aga			333

<210> 1188

<211> 420

<212> DNA

<213> Eucalyptus grandis

<400> 1188

taaaaacat	gcagtctctc	agccactgaa	catggcgctt	gaagctctca	actcgccac	60
cgccgcgcgc	cccttcggcc	acgacgagc	ggacggccac	ccgtgggcca	aacggaagcg	120
ctccaagcgc	ccccgcgcgc	accctcagga	ccagccctcc	gaggaggagt	acctggccct	180
ctgcctcacc	atgctcgccc	gccgcgcgcg	ccgacccggc	agcagcgcca	ggctccacga	240
gtgctccatc	tgccacaagg	ccttccccac	cgccagggcc	ttgggcgggc	acaagcgggtg	300
ccactacgac	ggcggcagca	gtagcagcgc	cgcccgctgt	gcctcttcct	cagaagccgg	360
cggtccctagc	cacacgactg	tcagccaccg	cgagccgatac	gacttgaact	tgccggcctt	420

<210> 1189

<211> 365

<212> DNA

<213> Eucalyptus grandis

<400> 1189

tgacgcgcag	cgacgtgggg	aagctgaacc	ggctgggtgat	cccgaagcag	cacgcggaga	60
agcacttccc	gctgccgggc	gggcccggcg	cgacgatgaa	gggcgtactg	ctcaacttcg	120
aggacgtcgg	cggaaggtg	tggcggttcc	ggtattcgta	ctggaacagc	agccagagct	180
acgtgctcac	caagggttgg	agccggttcg	tgaaggagaa	gagcctgaag	gccggcgaca	240
ccgtntgctt	ccagcggctg	accgggcccg	acaagcagct	ntacatcgac	ttcaagccgc	300
ggggccagcc	gccggccggc	ccggccgcgc	cgccgcgcgc	gcccgtacag	atggtgaggg	360
tggttc						365

<210> 1190

<211> 434

<212> DNA

<213> Eucalyptus grandis

<400> 1190

atcacttcaa	caccatgacc	ttacaaaaac	aaagcaattg	ttagaacat	ggttgctcaa	60
ctgaagaact	tcatgctgc	gctacaagaa	ttggaggaga	agaagaagaa	cgaagtgcac	120
cctagctcga	gcacgggttc	gtggatgtgg	aaccctagtg	ccgccagga	ggatgatgac	180
tcgtgggagg	tgagagcctt	cgccgaagac	actagcaaca	ttatgggcgc	aacctggccg	240
ccgaggtcct	acacttgctc	tttctgtaga	agggagtcc	ggtcgcccc	agccctcggc	300
ggccacatga	atgtccaccg	cagagaccgt	gctaagcttc	accaatcaca	attccggccg	360
ctggcgaacc	aaaattctcc	tttcgcttct	tgctcttccc	cgtcctctcc	gactctgcta	420
ttcccgaatc	aaga					434

<210> 1191

<211> 479

<212> DNA

<213> Eucalyptus grandis

<400> 1191

gaatcgtttc	ttggactttc	ttgagctgct	cctttcgctt	catttctcaa	gtgcgtgaaa	60
accaaaaaaa	tggtgagggg	gaagactcag	atgaggaggga	tagagaacaa	gacgagcagg	120
caagtgcact	tctcgaagcg	tcggaacggg	ctgctcaaga	aggccttcga	gctctcggtt	180
ctttgcgatg	ctgaagtcgc	cgccatcatt	ttctctccta	ctggaaaact	ttatgagttc	240
tctacctcaa	gcatgagcag	cataatagaa	cgatatcaaa	ggaaaacaaa	ggaccggggg	300
tgacgagaga	aaactaccga	aatcgatttg	cagaatatga	agggaaactc	tctagacatg	360
gcaaagatga	tcgaacttct	caacgtttcc	aacagtcggc	tctcaggaga	actttcagat	420
acgtgttcag	ttgaggagct	acaatcaaca	cagaacctgt	tagagagaag	cttatccaa	479

<210> 1192
 <211> 310
 <212> DNA
 <213> Eucalyptus grandis

<400> 1192
 ccctcttctt cttcctctcc ctctctctgt cgcagagctc cgtctgaact cgcagaatcc 60
 acgcgcagag cgaccaaga gtgtttcaga acagtccgtc catggccttg gaagctatca 120
 actctcccac cgcggcctca gcgcggttcc agttcatgga ggagcccttg agtcccgt 180
 tcttgagacc cctgaacaag cgcaagcgct ccaagcgccc ccaccaccct ccctccgaag 240
 atgagtacct cgccctctgc ctcatcatgc tcgcccgag cggcgcgcgc cccaagccca 300
 accaccacgc 310

<210> 1193
 <211> 466
 <212> DNA
 <213> Eucalyptus grandis

<400> 1193
 tttttttttt tttttattca aaaacaaaat ctcaattgcc ctttcttaat atatagtagc 60
 caaagccttc tggagatcac cttttatcac ctaccaccag tcagataggt ctattgaata 120
 tgcttgattg ctggttcttc aagcatatgc aactacaaag actcccatat caaagcacta 180
 gctgcatata cacttttaag ctaactaaca agagaattta aaaagaaaat cctcgtctga 240
 ccaaaaaggc tcgatccata tgggcaccaa aacaaatagc tcacattggc ataagctttg 300
 gaccattatc aggcattgcc atccctgcag ctaactcagc atcaagctga gtatgtggcg 360
 caggaccat catttgcttc atacgtttct tgtggcgctt cgtcttgaaa tgctcgtccc 420
 tcgtagcaac attcggaata tatcggtcgc agtgcaggca atagta 466

<210> 1194
 <211> 295
 <212> DNA
 <213> Eucalyptus grandis

<400> 1194
 gccacccaac acacacccaa gaaaattctt agagcctcct tagatatgcc tacagacctg 60
 gacaattcgt ccacagcttc aggggaagct agtgctcgt cttctggcaa tcagccgcct 120
 ccacaaccac cgccaccgcc ttccaccacc aagaaaaaga ggaatctccc tggaatgccc 180
 gatccagatg cagaggtgat agctctgtct cccacgacct tattggccac caacaggttc 240
 gtctgcgaaa tctgcaacaa gggatttcag agggaccaga acttgagct ccaca 295

<210> 1195
 <211> 337
 <212> DNA
 <213> Eucalyptus grandis

<400> 1195
 tccacctca ctgcgaagt caaaatcttc tagttagacc atattcttga tgaacattca 60
 cagcaacta ccgtcgagc tgcgggtgcc gagccggcg cagtcgtctt cgccgtcccc 120
 gtgcagtcg tcgcagtcgg agtcctccgc gagccacgcc gcgtgctccg acgaggagcc 180
 ggccgtggcg ctggcttcca gccggcccaa gaggcgggt gggcggaagg tcttcaagga 240
 gacgaggcac ccggtgtacc gtgggggtgcg gcggcggaac aggggcaagt ggggtgtgcga 300
 gctccgggag cccaacaaga agaccgggt atggctc 337

<210> 1196
 <211> 450
 <212> DNA
 <213> Eucalyptus grandis

<400> 1196
 gaatgatgca tgtgatggac cggtaacagg acttgactg tcaaagtgcc gnacgctcat 60

cggtctgcca	gaaactcacg	gagagagaga	gatggcggag	agagaggaga	aggggaagta	120
cgacgagatg	atgatgaaga	aggggagcga	cgganggata	gcggaggtga	atcccacgcc	180
gaagaagggg	gtgacgtcca	aggttgtgga	ctacattgag	aagctgatcg	tgaagttcat	240
gtacgactcc	tctctgctc	accaatacct	cgccggcaac	ttcgctccc	tcgccgacga	300
gacccctccc	gtcaccgacc	tcccgcgtcg	cggccatctc	cctgattgct	tgaatggaga	360
attcgctccg	gtgggcccc	atcccaagtt	tgccccggtc	gccggatacc	actggtttga	420
tggagatggc	atggntcatg	ggatgcggat				450

<210> 1197

<211> 351

<212> DNA

<213> Eucalyptus grandis

<400> 1197

ctccagccag	cttctgtctc	ttataaacac	tagccccacc	ccattcatta	tccacttcac	60
tccaacccaa	cagctatcgc	actatcccac	tgcagacgcc	ctcccacgaa	ccctttctct	120
tctgatcccc	atcccactc	ctgcccgttc	gacttcccc	agccgtcctt	ctcgctcgccg	180
ctgtccaacg	ggagtagcgc	catggcagcc	cccgggaact	tctccgacga	ggaggtgcgc	240
ctcgcgctcc	accacccaaa	gaagcgcgcc	gggaggaaga	agttccggga	gacgcgccac	300
cccgtgtacc	ggggagtgcg	gctgcgtgac	tcgggcaagt	gggtctgcga	g	351

<210> 1198

<211> 359

<212> DNA

<213> Eucalyptus grandis

<400> 1198

agaacacctc	agaatcaaca	ccactcccca	atttctctct	ctaagatccc	acacccaacc	60
gccaccctca	atctctctct	ttctctctct	tcttcagtgt	ctgccatggc	tttggaggcc	120
ctcagctccc	ccaccgctcc	ctccgcccc	ttccaattca	tgaaggactc	ctcccccgcc	180
gccgcgcgcg	cgcctcctc	ctcctcctcc	gcctacgacc	tccccctcgc	cgagccctgg	240
gccaagcgca	agcgtccaa	gcgccccac	aaccgcct	ccgaggacga	gtacctcgcc	300
ctctgcctca	tcattgctcgc	ccgcggcgcc	gccggccgga	ccctcccccc	gccgcctcc	359

<210> 1199

<211> 645

<212> DNA

<213> Eucalyptus grandis

<400> 1199

tcgactgaga	gatccatagtg	gaaatagaag	atttctctgat	accatcgatc	cattcttctc	60
caatggctgc	gaatttcgtc	attccaacca	aatgaaggc	ttgggtgtac	cgtgagcacg	120
gagacgtcgc	caacgtattg	ggattggacc	cggaactcaa	ggtccctgaa	ttgcaagaag	180
gccaagtgc	ggttaaagtt	cttgccgcgcg	cgctcaatcc	aatcgacacc	gcgagagtga	240
anggggggtta	tcaagctccc	ggcttttctc	taccggccgt	gccaggttac	gatctcgccg	300
gcgttggtgt	gaaggtgggc	cgcgaagtaa	aggagctcaa	ggtcggggac	gaggtatatg	360
gatttatgtt	tcacgccaag	aaagacggga	cgctggctga	gtacgcagcc	gtggaagagt	420
cattcttggc	tttgaagccc	aagaagctgc	gtttcgggga	ggctgcttct	ctgccgtggt	480
cattcagacc	gctatggagg	ccttgaaaga	actggcctct	ctcatggcaa	gtcccttctt	540
cgtcttaagt	ggtgctgggtg	gcgtcggcac	actcataata	cagctagctt	aaggaagttt	600
tgggtgcatca	agagttccag	ttcattcaac	actgggaaac	ctaga		645

<210> 1200

<211> 376

<212> DNA

<213> Eucalyptus grandis

<400> 1200

tttttttttt	tttttgtgta	ctgggtgcact	atgaattgtg	agcattcaat	caaactatat	60
atagacaaca	ttcttcctta	tataggcggg	agcaactacg	gngttgacag	caaaatttac	120
aaagccagca	gtagcacacg	gatgtcaaga	ttcacctcca	aaccgataaa	gtcgacatgg	180

ctctattaat	ccagccaaga	tatagagccc	cctccctctg	ctcgattctg	taattcccgt	240
gatactgctt	cagcatatcg	agcacagcac	gagtaaccga	tgcgtccact	ggtagctgat	300
tgaaacccggc	catttggaa	ctggaccgcc	atttgccgaa	aagctcatgc	ctttocatcc	360
tctcangccc	atcaca					376

<210> 1201
 <211> 461
 <212> DNA
 <213> Eucalyptus grandis

<400> 1201						
cgacaccgac	cagggtgttc	atgtattgtt	tgtatacaac	ccccagtg	aaagggccca	60
aaacacaagc	caacatgcac	atgtaatgtc	tgtctgaccg	taaagcgccg	tttccgcacc	120
ttgatgctga	ggcgcgaaaa	gaaacagttg	gagaaagaag	gggaaggttc	gcgcaagaag	180
ctgcaacatc	agaacctatc	acttgcagaa	aaatcaccgg	aagacgaccc	ttcaaagtgc	240
aataacaaca	atgcaaatgg	cagcccaagc	cagaaaaagg	tgggcaatga	tggttccgac	300
gacgaaatga	acaggggttaa	aagctcgggt	tcacctttta	aaggtcagat	cgatcttaat	360
attcagccag	agcgcgagga	ggagctctcg	cctgggtcag	attctggtgg	tatgatgaag	420
ttgctacatg	atgccacca	gaatatctca	ggcagagggc	t		461

<210> 1202
 <211> 447
 <212> DNA
 <213> Eucalyptus grandis

<400> 1202						
ggaagtacga	cgagatgatg	atgaagaagg	ggagcgacgg	agggatagcg	gaggtgaatc	60
ccacgccgaa	gaaggggggtg	acgtccaagg	ttgtggacta	cattgagaag	ctgatcgtga	120
agttcatgta	cgactcctct	ctgcctcacc	aatacctcgc	cggcaacttc	gctcccgtcg	180
ccgacgagac	ccctcccgtc	accgaacctc	ccgtcgtcgg	ccatctccct	gattgcttga	240
atggagaatt	cgtccgggtg	ggccccaatc	ccaagtttgc	cccggtcgcc	ggataccact	300
ggtttgatgg	agatggcatg	gttcatggga	tgcggataaa	aaatggcaaa	gctacttacg	360
tctctcgcta	tgtgaggacg	tcgaaactta	agcaagagga	gtactatggg	ggagctaaat	420
ttatgaagat	tggagacctt	aaagggc				447

<210> 1203
 <211> 454
 <212> DNA
 <213> Eucalyptus grandis

<400> 1203						
catatthttca	tgtgtctacg	ccccgtcctt	tggcctgcat	ccatggccaa	tcagccaccc	60
ggtgagcccc	aaccaaattcc	gccaccgcca	ccgccaccag	cccagcgat	ccaaatccct	120
gaccaaccac	cgcataattc	gccttcttct	tcttcttctt	cttcttcttc	ttcttcttca	180
ttggccacca	ccggtgatcg	ggcggttcc	tcgcctagac	cgatgctttc	tcgagcgggg	240
tcgtcgccgc	tggctcaatc	cacagggagg	caccgccttt	accgtggagt	ccgggtcccgc	300
agcgggaagt	gggtctccga	gatccgcgag	ccccgcgaag	ccaccgcgat	ttggcttggg	360
acatacccga	atcccgcgat	ggccgcgcgc	gcctttgacg	tggccgcgct	ggctctgaaa	420
ggctccgacg	ccgcctgaa	cttcccccat	gatg			454

<210> 1204
 <211> 352
 <212> DNA
 <213> Eucalyptus grandis

<400> 1204						
gtttttttacg	catgtagaaa	aagtcattga	gtttgcctgt	gctgcataca	ttcattgctt	60
tagctgactg	gggcctgaga	gagtttgtgt	atgttactgg	cagacgccga	agggcgaaag	120
gagaagaagg	aagttaaaga	aaggttcgcc	ttcaagacga	aatccgaggt	tgagatacta	180
gatgacggat	tcaagtggag	gaagtacggg	aagaagatgg	tgaagaacag	tcggaatccg	240
aggaactact	atcgggtgttc	ggtggaaggc	tgtcctgtga	agaagagagt	cgaacgggac	300

agagacgacc caaggtatgt aataacaaca tacgagggca tccataatca cc 352

<210> 1205
 <211> 400
 <212> DNA
 <213> Eucalyptus grandis

<400> 1205
 ccgaaatggc cgaacttgat gaatcttcca ctttggaact catcacgcag tatctcttag 60
 aagactctat caacctcgct caactccaac cggtgaaaac agagaacctg tttctcgatc 120
 caggaccaga ctgccagat tcagatcatc ccacctggca agacctggag acaccaaadc 180
 ttgagattaa agccgagccc atcaccttgg aatctccaga gtcggagttg gggtcgccgg 240
 agaagaatca ggacgaggct ggctccgcgg ccaaggcaag ttacagaggg gttcggcgaa 300
 gaccatgggg aaaatatgct gcggagatac gggacccgac acgtaaaggg agccgggtct 360
 ggtaggggac ctacgacacg gacgtagatg ctgccaggc 400

<210> 1206
 <211> 408
 <212> DNA
 <213> Eucalyptus grandis

<400> 1206
 tttttctccc ttggtgcgtg atgtgtggag gcgccatcat ttccgacttc gtcgagngcg 60
 gtcgaccgc cgccgccccg ggagctgccg ccccgagagg aagctgacct ctcacgagct 120
 ctgggtccgag ctcgaccccg cctccgacct cctcagctc gacggccccg tggccaagg 180
 ccacccaac cctttctctc tcgtcgcaaa ccaactcaac caagtgatga agagtgaaga 240
 gaagaacagt gaggaggcgg gtcacggaca cgtgtcggag acccagaaga gccagagcaa 300
 tggccggagc cagagggctc gcaagaacgt gtacagaggg atccggcaga ggccgtgggg 360
 caagtgggac gccgagatca gggaccccca caagggcgctc cgcgtctg 408

<210> 1207
 <211> 270
 <212> DNA
 <213> Eucalyptus grandis

<400> 1207
 accgtgggat ccggcagcgc ccgtggggca agtggggcgg ggagatccgc gacccgagga 60
 agggcgctcc ggtctggctc gggacgttca acaccgccga ggaggccgcg cgggcttacg 120
 accgggaggc ccgtaagatc cgcggcaaga aggccaaagg gaatttcccc aacgaggacg 180
 acgccttctc caccatcccg cgggctcacc agaccagca ccaccacccc caggtccccg 240
 aactaccctc ctctgtatca acccaactgg 270

<210> 1208
 <211> 339
 <212> DNA
 <213> Eucalyptus grandis

<400> 1208
 ctttctgctg gacggaaacc actttggggc agctcgatcc ccgtgatgcg caacttttggg 60
 gggccaccag gtctccttgc gaggcaatga atgagggcgg gccattgaaa accataaagg 120
 atacaaaaat cgataatatg cagtctcgctc gctttctcag atatgcttaa aatcatatgg 180
 ttagaataga tgatcgcaaa cctctgaaat gggaaaactg agagataagc tcggtaaagct 240
 ttcaacattt cagtagcaga ttcccttttg gagcctaact ccgtatagac ttgcgctcct 300
 gtgcaatcca tgcgtgcctt aagggtctcg gcaaaagag 339

<210> 1209
 <211> 405
 <212> DNA
 <213> Eucalyptus grandis

<400> 1209

aaacctgca	attcaggaaa	agaaaccct	ttttgatctc	tctccatctg	ctccgatgg	60
cgggttcggag	gggatgaatt	cttgaaaaac	aaggaggaac	gatcgtctcc	tttcttggg	120
gggctgggga	ttggggggag	gaatgggggc	gcagcacaac	tcaggacgaa	cccggaatgg	180
gagacccatg	tgatcctgaa	cgtgtacgat	ctcaccctcg	cgaacagcta	caccgcctgg	240
tgcggcctgg	gcatcttcca	ttccggcatt	caaggttctc	tgtgtagttg	cattcttcca	300
gaaagccttc	aagtaactac	tgtaagcca	gagtatcatg	acttctccga	ggaagatgg	360
gctgaatctg	tgtegactgt	gactaccgag	atagatgacg	ccgag		405

<210> 1210

<211> 521

<212> DNA

<213> Eucalyptus grandis

<400> 1210

tccttctctc	tccttctctc	tctcttctgt	ctcttctcaga	catgtctgctc	aaccaccccc	60
tctctacttc	agacggcacc	cccaacactc	tctgggtggac	cactcaccctc	accatgttcc	120
gccagcaca	cctcctcctc	aatttcaacc	ccaccgacga	cgaccgcaa	gacgagggct	180
cgcccccgcc	gccctacgtc	ctccgagggg	cgccgccacc	ggcggagccg	tcgctgacg	240
agaaagagcc	catgttctgag	aagccgctga	cgccgagcga	cgtggggaag	ctgaacaggc	300
tggtgatacc	gaagcagcac	gcggagaagc	acttcccgtc	ggtgggagcg	gcgaccagc	360
agctgagctt	cgaggacgag	tccgggaagt	ggtggaggtt	ccgctactcc	tactggagca	420
gcagccagag	ctacgtctctc	accaagggct	ggagccgctt	cgtcaaggac	aagcgcctcg	480
acgcggggga	cgtggtcctc	ttcaccgcga	ccgcgcgac	g		521

<210> 1211

<211> 537

<212> DNA

<213> Eucalyptus grandis

<400> 1211

ttcgaaaatc	ccatttctctc	tcgacctgtg	tagcttgcaa	ctcttgaggt	cttgatagag	60
aaggagagag	aaggagaaaag	agtgggtgat	gggtttcggg	ggaagttgga	gcgtgccgc	120
gaaggcgtgc	gactcgtgca	agaccgcggc	ggcgcccggtg	ttctgccgcg	ccgacgcggc	180
gttctctgtc	ctcggtctgc	acgcccgggt	ccacggggcc	gccaagctgt	ccgcgcgcca	240
cgagcgggtg	tggtgtgtgc	aggtctgcga	gcaggccccc	gccgccgtca	cctgcaaggc	300
ggacgcgcg	gcgtctctgc	tcacctgcga	cgccgacatc	cactccgcca	acccctctgc	360
ccgcgcgcc	gagcgggtgc	ccgtggagcc	cttctctcag	gccgccgagt	ccatctccag	420
ggcgcctcc	gccttcaact	tcctcgccgt	gcctaccaag	accggcagcg	ccgacacgtg	480
cggcgccggc	ggtggcggct	tcggcggtc	gtgccagaat	gaggagctgg	aggaagc	537

<210> 1212

<211> 399

<212> DNA

<213> Eucalyptus grandis

<400> 1212

ccgaaacgcc	tttttctca	catttcccat	ctccttttcc	aagaagcgaa	gcccgaaaag	60
tccaatcccc	gttcttccaa	accctgcaat	tcaggaaaag	aaaccccttt	ttgatctctc	120
tccatctgct	ccgatggtcg	gttcggaggg	gatgaattct	tgaaaaacaa	ggaggaacga	180
tcgtctctct	tcttgggggg	gctggggatt	ggggggagga	atggggggcg	agcacaactc	240
caggacgaac	ccggaatggg	agaccatgt	gacctgaac	gtgtacgatc	tcaccccgcc	300
gaacagctac	accgcctggt	gcggcctggg	catcttccat	tccggcattc	aagtgcattg	360
taaaggaata	tggctttgga	gcgcacgact	tttccagct			399

<210> 1213

<211> 283

<212> DNA

<213> Eucalyptus grandis

<400> 1213

ccccattttc	ccgtttctcc	catattctctc	aagcactctc	atttagggaa	tgagtgccta	60
------------	------------	-------------	------------	------------	------------	----

gaagccacct	caagtttcaa	atTTTTttcc	tgcgagttc	tcaattcaaa	tggcacgtag	120
ctcatgtaat	cagaaactga	ggaaagggtt	atggtcgct	gaagaagacg	agaaactggt	180
caattatata	agtagacatg	ggttgggatg	ctggagttcg	gttccgaagc	tagctgggtt	240
gcagagatgt	ggaaagagtt	gcagattgag	gtggatcaac	tat		283

<210> 1214

<211> 324

<212> DNA

<213> Eucalyptus grandis

<400> 1214

ttttcaagaa	gcacgcccc	gtaacggggg	aaatgctgag	ggagaaccca	tctgacggtt	60
ctttttgttg	aggggaaggga	aagagagagg	aggcagaggg	aggaaggaat	ccgcagcagc	120
agtcgtcgga	ggaggaggac	atTTTccagg	tgaaccccaa	gtagaattgc	gatattgggt	180
tattcgtaat	gggctgcgtc	gcttcaagaa	ttgatgaaga	agagagggtt	cgggcgtgca	240
aggagagaaa	gaggctgatg	aagcagttgc	tggtgttttag	ggaagaattt	gctgatgccc	300
tgttggttta	cttaagagcc	ctga				324

<210> 1215

<211> 358

<212> DNA

<213> Eucalyptus grandis

<400> 1215

tttaattggcc	ttgacgcagg	ggagggggaga	ttttctgaac	ttggggagat	ggtagaatag	60
ctgccgaggt	gtcaactcat	gtcagaattc	tgactgatct	ggggatcttg	ctctcaaaga	120
ggattttctaa	gagcagtatc	tcaacttggc	atacgttcag	caactggaaa	atagtagggt	180
caggcttatg	caactggaac	aggagcttca	acgagcacgc	cagcagggtg	tatttggttag	240
ttctggaaat	cctggggatc	tcagtcataa	catggctgcc	attggcaatg	gggccatggc	300
ctttgacacc	gactatgccc	ggtggctcga	tgagcatcaa	cggctgatca	atgacctt	358

<210> 1216

<211> 329

<212> DNA

<213> Eucalyptus grandis

<400> 1216

ccgctgtggc	aagagctgcc	gcctccggtg	gatcaattac	ctgcggccgg	acctcaagcg	60
gggcaacttc	accgaagaag	aggatgagat	catcatcaaa	ctgcacagcc	ttcttggtta	120
caaattggtcg	ctcattgctg	ggcgtttgcc	ggggagaacg	gacaacgaga	tcaagaacta	180
ctggaacacg	cacataagga	ggaagctttt	gaaccgaggc	atcgatccgg	ccactcacag	240
gctgatcaat	gagcccgcac	aagatcacca	tgacgagccc	accattttctt	ttgctgctaa	300
ttctaaggag	atcaaagaga	tgaagaaca				329

<210> 1217

<211> 346

<212> DNA

<213> Eucalyptus grandis

<400> 1217

aagaacgtcg	ccccatcaac	tccacccggc	gttttcaaga	actcgagag	atcaagaact	60
cgagccggct	tctgcagcgt	gcaccgttat	gccgtcggag	tgcccgacc	gcaagcccgc	120
gaaggccccc	cacggcggcc	acctccacgc	ggccggggcg	ggggccggcg	cgcgcagcc	180
gcaggagcag	gagcacctcc	cctgcccgcg	ctgcgactcc	accaacacca	agttctgcta	240
ctacaacaac	tacaacttct	cccagccccg	ccacttctgc	aagtcctgcc	gccgctactg	300
gaccacggc	ggcacccctca	gggacatccc	cgtcggcggc	ggcagc		346

<210> 1218

<211> 468

<212> DNA

<213> Eucalyptus grandis

<400> 1218
aaactgggat agatggcggg cagacgatga aaacgttgat agggagctta atgataatct 60
aaatgcacct tcataccctc ctcaccaacc tacgcaatct tatccaagag gaggctatag 120
agtatgtagt ggctgcaacc gtcaaatagg ctatggcaac tatttgggat gtatgggaac 180
tttcttccat ccggaatgct ttctctgtcg tgcttgcaagg taccctattc aagaatatga 240
gttttcctta gcaggaaagg atccttatca ccagtcttgc ttcaaggagt tgacacatcc 300
aaaatgtgaa gtttgccatc aatttatccc aacaaatgga gttgggttga ttgagtatag 360
atgccatcct ttctgtgccc agaaagtact gtccgtcgca tgagcttgac aaacacagct 420
ccgatgggtg tagttgccaa cggtttgagg gcatgggaac accaccat 468

<210> 1219

<211> 162

<212> DNA

<213> Eucalyptus grandis

<400> 1219
tgaggtagat attcttgacg atgggttatcg ctggcgcaag tatgggcaga aagttgtgaa 60
gggaaacccg aaccaagga gttactacaa gtgcacaagt cctggctgca cggttaggaa 120
gcacgtagag agggcgtcac atgaccttaa gtcagtaatt ac 162

<210> 1220

<211> 354

<212> DNA

<213> Eucalyptus grandis

<400> 1220
gcctggcatc acttctgaaa gaagatgatg ggtacctgaa tattctttgt ccatgatgaa 60
agcacaggga agtcggcagt aaatgtaatt gatgcgaaaa acatgtcatc tgatcctggt 120
gctgttggtg aattacccca tagggttcct tatggcttcc atgccttctt cgtgactgag 180
gaacaacttc aggaactggc taagctgtag gtctctacat gcacgaattg ttgggaatgc 240
agatgttgcg aggggaggca tatctctgga aagctgctac agttgatcta atagtttgat 300
atttcatatg acagacatct ttatgctaaa tatagtggaa atataaagta tgggt 354

<210> 1221

<211> 310

<212> DNA

<213> Eucalyptus grandis

<400> 1221
gcggaggagg ggctgagtcg gaaattgggg aactcgggtg cttgcgaagg tagggaccgg 60
gtcgaaagat gcgagggtgt cgggaagtgg agggcccgca tggggatggc tgggttcgag 120
ctgaagccac tgggtcaaca cgtggccgaa tcaatgaagg cgaggctcga aagtgggaac 180
cgggtcaacc cgggattcac ggtgaaagaa gagaatggtg ggatttgctt cggctggctc 240
ggccgaacac tcaccgtcgc atccgcctgg cgtaagctc cactcgctcc ccctctctcc 300
cccctgtgca 310

<210> 1222

<211> 315

<212> DNA

<213> Eucalyptus grandis

<400> 1222
atttcagatc ccatcatgna tgcattgact tgccattaca gagaattatg caattttcat 60
ggatcttctt ctttatttca ggcccaagga aatgggtana gataacaagc taatatttac 120
atttgataaa accaaaaaat ctgcgttttg ggtacttcca cgatatgcaa agaacgagct 180
tcaaatacaga tggtttgagc ttccaaactg cttcattttt cacaatgcca atgcatggga 240
ggaggaagat gaagttgttt tggttacatg ccgtcttgag aatcttgatc tggacatggt 300
cagtgggact gtcaa 315

<210> 1223

<211> 393
 <212> DNA
 <213> Eucalyptus grandis

<400> 1223
 gcttaatcct caaagaaagt gaagctaccc ttcgtgaagc tcttcggaac atgatgcaga 60
 atggcaaatc gaaagtgcc aatgagggga agggccacgg caagaagcaa ggcaggcgca 120
 agagggatgt ggctgacttg agaactcttt tgacactttg tgcacaagct gttactatgg 180
 atgatcgagg aagcgcaggt gagctgctca agcagatcag aaggcatgcg tctcccacag 240
 gggacgggat gcaaaggatg gcacactatt ttgcgaatgg tctgcaggca cgccttgccg 300
 ggtcaggctc tcaaattttt aaggctctca tggctaggcc aagatcggct gttgatgtct 360
 tgaagggtta tcatctctc ctcacaattt tgt 393

<210> 1224
 <211> 337
 <212> DNA
 <213> Eucalyptus grandis

<400> 1224
 gagaaatcct catcatccgt caaggcaatc tcggatcctc aagccagcca ctgnagaagt 60
 gttcgtagca tctcttctca aagatctagc cgagatcccc ggccttcttc aagcagctta 120
 cgatctttac aagtgggacc ttcagaagag agactgccat cagtcgcaga tggttactca 180
 agacattcga ggccactttc tgccatagga tggcgtaata atgatggggc tcggagatca 240
 agggatatcta ctgaaagatt tcggtcggtt cctgatgaag gaagtggccg tgatcaatta 300
 gaatatgagg gattcatgat tgcggatcgc ccagggt 337

<210> 1225
 <211> 226
 <212> DNA
 <213> Eucalyptus grandis

<400> 1225
 tgttggcacc atgtacacac acagtgtggt aaagcaggct ttgggatgct caagcaagag 60
 aatctgagca atgaactaga taggggtcaaa aaggagaacg acaacttgca gattcagctc 120
 aggcacctga gagngaagac ataacatcac tgaaccacag agagctgata atcctagaag 180
 acactcttga aaacggcctc ggatgtgtcc gagaccagaa ggacga 226

<210> 1226
 <211> 415
 <212> DNA
 <213> Eucalyptus grandis

<400> 1226
 cggaccgcca ggactgcacg gtggcgtgcc ggatgttcgg gccgggggtgc ttcggggggcg 60
 agcccttctt cgtggcgagg gatccggacg attcggaggc ggaggaggac gacggctacg 120
 tggtagtga cgtgcacgac gagcgcaaag gggagtcgag gttcctggtg atggatgcca 180
 agtcgccgga gctggacatc gtggcctccg tccggctacc caggcgggtg ccgtacgggt 240
 tccacgggct attcgtgagg gatagccacc tcaaaatgtc ttagcgttca tgggcgatga 300
 tgcgacgtgg aggtacagag attgggggtct tttattacag gattttacgt agtctagagc 360
 atgatacaaa gctatatccc accaacaatgc cgcagttaaa ttaggtgggg tagtt 415

<210> 1227
 <211> 389
 <212> DNA
 <213> Eucalyptus grandis

<400> 1227
 acattcatgg ggatatgcag cctccaacat tcatctcagc aggcggagga ggcgctgtcc 60
 caggggctag aacagctcca acagtcactc gtcgacacca ttgccggcgg gccagcatc 120
 gaaggaatgc aacagatggc aatcgcttg ggcgaattaa ccaatctcga aggctttgtt 180
 cgacaagctg ataacttng gcaacatacc cttcatcact gncgccggat actgagagtt 240

cgacaagccg	cacgcgattt	tttgggtgatc	ggagagtatt	atgggtcgact	acgagcattg	300
agtactctat	gggcgtctcg	tcctcgaggg	tgcattgatgg	atgatgataa	ctcacgccaa	360
acaacaacgg	acctgcaa	tgttcaggt				389

<210> 1228
 <211> 435
 <212> DNA
 <213> Eucalyptus grandis

<400> 1228						
cttcaccggc	actaggaatc	agggcttctt	ggagggattt	gggttctcca	cctcgtcgtc	60
cacgttgtcg	gaaactgcga	accgggggga	gaactccggg	agtgccgggg	tggtcagatt	120
gaactcgcgg	tgcccttgac	tttgctgag	ttgacgccac	gccctccgag	acgctcacc	180
tggtggcagt	caaggcgacg	gcgacgcgac	ggcggctgag	gagacaggag	ttggggcctc	240
atagtggtag	ctcgtgcccc	ccgagagctt	ggccggtagg	ggagctcttg	tgccagatcg	300
agcactcgtg	gaccttcccc	gacataccgg	aggaggtggt	cgtcgcggag	gtcgaggtgg	360
ccggctgttc	gtccgcaccg	gcgaagagaa	agtgtgttgg	tatagaggcg	agaggagaga	420
gaagagagag	aagaa					435

<210> 1229
 <211> 252
 <212> DNA
 <213> Eucalyptus grandis

<400> 1229						
gcaatccaga	cccagatgcg	gaagtgatag	ccttgctgcc	gaagacgctc	atggcgacca	60
accgattcat	atgcgagatc	tgcaacaaag	ggtttcaaag	ggaccagaac	ctccagctcc	120
acaggagagg	gcacaacctg	ccttgaagc	tgaagcaaag	accaaaggat	gaaccgataa	180
ggaagaaggt	gtacgtttgc	cccagaccga	catgctgca	ccatgacgcg	ttgagagcgc	240
tcggtgatct	ca					252

<210> 1230
 <211> 326
 <212> DNA
 <213> Eucalyptus grandis

<400> 1230						
catccatgcc	cgagaccgga	aacgccgcaa	cgccgcgagc	tccgatcccc	atgccgggga	60
atttccata	ccgcgccag	gagatccagt	agggggggcg	tccgnaagcg	gccctggagg	120
gggtatgcgg	ccgagatccg	agaccgggag	aagaagaccc	gantctggct	cgccaccttc	180
gacaccgccg	aggaagcagc	ccgcgcctac	gacgcggccg	cccagagaatt	ccgcggctcc	240
aatgccaaga	ctaacttccc	cctcggnttc	cgcgcccccc	aggtcatggc	caagaccaac	300
tcggtagatg	catcagcgag	tagcgg				326

<210> 1231
 <211> 424
 <212> DNA
 <213> Eucalyptus grandis

<400> 1231						
cttcctacct	cgtcagccct	tcggctgttg	gatcaggttc	cgaaactgtg	ttcctagact	60
tgagccttgg	ttgcagcaat	gatgagtcca	gcgggagggg	ttctgtagga	gtcgcttct	120
cgagcaccag	cgaatgtagc	aatgagcccc	aatctcatcc	ggcagctgca	ggaccaacca	180
cttcaagagt	cttttcttgc	aattactgtc	aaaggaagtt	tttcagctca	caggcactcg	240
gtggccatca	gaacgcgcac	aagagagaga	ggaccctggc	aaagcgggca	atgaggatgg	300
gcatgttttc	ttcacagaga	tattccagct	tggcgtcttt	gcctttgcac	gggtctcca	360
ctgtcagggg	tctggggatc	aaagcgcat	cttcctgtgca	ccaggtgcac	caaggcatgt	420
tgca						424

<210> 1232
 <211> 321

<212> DNA

<213> Eucalyptus grandis

<400> 1232

atgatgatga	agaaggggag	cgacggaggg	atagcggagg	tgaatcccac	gccgaagaag	60
ggggtgacgt	ccaaggttgt	ggactacatt	gagaagctga	tcgtgaagtt	catgtacgac	120
tcctctctgc	ctcaccaata	cctcgccggc	aacttcgctc	ccgtcgccga	cgagaccct	180
cccgtcaccg	acctccccgt	cgtcggccat	ctccctgatt	gcttgaatgg	agaattcgtc	240
cggttgggcc	ccaatcccaa	gtttgccccg	gtcgccggat	accactgggt	tgatggagat	300
ggcatgggtc	atgggatgcg	g				321

<210> 1233

<211> 508

<212> DNA

<213> Eucalyptus grandis

<400> 1233

gacgagatga	tnatgaagaa	ggggagcgac	ggaggggatag	cggaggtgaa	tcccacgccg	60
aagaaggggg	tgacgtccaa	ggttgtggac	tacattgaga	agctgacgt	gaagttcatg	120
tacgactcct	ctctgcctca	ccaatacctc	gccggcaact	tcgctcccgt	cgccgacgag	180
accctccccg	tcaccgacct	ccccgtcgtc	ggccatctcc	ctgattgctt	gaatggagaa	240
ttcgctccggg	tgggccccaa	tcccaagttt	gccccggctc	ccggatacca	ctggtttgat	300
ggagatggca	tggttcatgg	gatgcggata	aaaaatggca	aagctactta	cgtctctcgc	360
tatgtgagga	cgtcgaaaact	taagcaagag	gagtactatg	ggggagctaa	atttatgaag	420
attggagacc	ttaaagggct	ttttggttta	ctcatgggtca	atatgcaaat	gctgagagca	480
aaactgaaaa	tactagatgt	ttcatatg				508

<210> 1234

<211> 503

<212> DNA

<213> Eucalyptus grandis

<400> 1234

gcccgatgtc	cccctcccct	cccccgccgg	agacgtgacc	gatgccgagt	ggttctacgt	60
catgtccttg	accgctctt	tctcgccggg	agacggtatt	cccgggaagg	ccctcagcac	120
ggggtccttg	gtctggctga	ccggtgctcg	cgagcttgag	tcgtacaagt	gcgaccgggc	180
caaggaggcc	gagctccatg	gcatccgcac	catggtttgc	atcccgaactg	tgatggagat	240
ccttgaattg	gggtcttgcg	atgtgatccc	tgaaaacttg	ggccttgttc	aacgagccaa	300
gtctcttttc	ggctccgac	tgctccttcc	caagcaccg	ccaccgccac	cacctccgtt	360
ccagctccac	catgaccata	gcgacatttc	tttcgctgac	attggaataa	ttgcgggcgt	420
tcaagagaat	gatttcgctc	ctcacgatga	ccacgagaag	aaggtaaga	agaagcagcc	480
gctggtggaa	ggagctggcg	gga				503

<210> 1235

<211> 367

<212> DNA

<213> Eucalyptus grandis

<400> 1235

aaaaagtata	tatacctcgg	cctattttgat	agtgaagtag	aggcagcaag	ggcgtatgac	60
aaggcagcta	tcaaatgtaa	tggaaagagag	gctgtgacca	actttgaacc	tagtacgtac	120
gatggagaga	tgattgcaaa	agccagcaat	gaaaatagca	tctatggtga	ccatggtctt	180
gatctcaatc	tcgggatatc	agcttcttcc	aggggaatgg	tggaaacctt	agagccctcg	240
gacgacatgc	gtcaggggaag	tagtttaagg	gtaggaaact	ctgctgcac	ctggggtgat	300
ccatctgttg	aaggtttatc	gatgacatct	ggacaacctc	ctccttgacg	ggtgttttatc	360
ctagcgt						367

<210> 1236

<211> 360

<212> DNA

<213> Eucalyptus grandis

<400> 1236
 ctccgcccgtg gcgggtcgccg cgacaacagc aacaacctcc tctctctcca cctcctcgac 60
 cgggtcggat ccggcgctag aaccgagcaa aagaagcgag gattgcactt ctcaaaaggg 120
 cccgggggaag tccccgagcc cgggcgcccc cccggaggag ccggccggca agaggcacia 180
 ggccgggggc tccggcgagc acccgacgta ccgtgggggtc cgaatgcgga actggggcaa 240
 gtgggtgtcc gagatccggg agccgaggaa gaagtcgaga atctggctcg ggacgtacct 300
 cacggcggag atggccgccc gggcccacga cgtggcggca ttggccataa agggcagctc 360

<210> 1237
 <211> 539
 <212> DNA
 <213> Eucalyptus grandis

<400> 1237
 tctctctttc tctctctctt gtgattgcag atcaggctcc cagcccgctc cattcgcgca 60
 tctccgacct cctctctcca cgcggccact gtcccgtcgc gcgaattcac cccgcccgtc 120
 taggagaccg catcctacgc cgccgnggagc nanggcggcg ccacgaggag atgccagggg 180
 aaggaatcaa ttacttcctc gttactggcc caggataaca gatcaagagc tacaacaaat 240
 ctctggagag tctcttttgc ttctatgtgc tttgattgat ttatagcaac tctagaaaag 300
 gtgaattatc gcgcgtcaat agaacagggt taggatttca atagatagga tgaaaagccg 360
 ggaagggttca gtttcacctc tgctactaat tagcattcat gatcctattc cttaactttt 420
 ataagctcaa actctgtaat cactcctctg tttgagaaaa tggtgagtgc tagtgatgca 480
 ggtaaaattg gacgtttagt gctgccaaga aaatgtgccc aggcctattt tccggctat 539

<210> 1238
 <211> 520
 <212> DNA
 <213> Eucalyptus grandis

<400> 1238
 tctggctgtc ctgatagctt tgatgaaggc agatctggaa tttttgaatt caaacctcta 60
 gctacatcaa acttgggtccc cacagaggca aagcaccaag gaagtgaaca ggctgtgaaa 120
 gtttcagggtc aacgtcattc tcaaccattt gcatcactgt cttcagttca gagtgatattg 180
 gctgtctcat cgaagggaatt gtgtctatcg gtacccactc aagcgggttcg ctccgggggt 240
 agtccacttg ctgaagctga tctgatgga ttgttaggta ggaaagagca gccaataat 300
 gtgatgcagg tgacacaact ggataataaa ggggaatggcc cttcagtcac gactgagaga 360
 ctctctgacg atggatataa ctggagaaaa tatggacaga agcatgttaa gggctgtgaa 420
 tttccacgca gctattacaa atgtacctat cctaattgtg aggtgaaaaa gcttttcgaa 480
 cgtgctcctg atggacatat tacagagatt atctacaaag 520

<210> 1239
 <211> 489
 <212> DNA
 <213> Eucalyptus grandis

<400> 1239
 ctcagatgtg ggacaagctg agggagatta aaaattcatt gcttggacct gaatctgata 60
 tcagtgatag ctgcaattgt tgcttaaata gtgggagcca ccaattcacg tcaactgggc 120
 agtgggatgt acgtcagatg atagagatga tccctaaaat tggatttgaa ggacatgctg 180
 attttctgtg cacaagcagt tgccgaagct gacatgccta agacagctgc tttgatggag 240
 gtgttagaga ggatggtgtc tgtctcagga gatccaatcc aacggttggg tgcttactta 300
 ttagaagggc ttagagcgag gttggaatca tctgggagca taatctacag aaagctcaag 360
 tgcaaagagc cactggctc ggaattgatg tcttacatgt ccactcctta tcagattttg 420
 ccatactgga agtttgcta cgagtcggca aatgttgtaa ttggggaagc tataaagtac 480
 gagtcaaga

<210> 1240
 <211> 306
 <212> DNA
 <213> Eucalyptus grandis

<400> 1240
 gccaacgctc accnccttgg cagctgaggc agcggcgggcg gccgaggagg cagcagtgag 60
 ggccctcgtag tggcaccgct tgtgcccggc gagagcggtg ccggtgggga agctcttgtg 120
 gcagatcgcc ggaggaggtg gttgccgcgg aggtctaggt ggccggttgt tcgtccgcgc 180
 cggcgaagag aaagtgtgct ggggagagag agagcgtgca gagaggtaga agagagagaa 240
 gagagaggag agagaacgtg aaaggaggca gaagagagag agtgcagcga ggggagagag 300
 aggaca 306

<210> 1241
 <211> 366
 <212> DNA
 <213> Eucalyptus grandis

<400> 1241
 gagcattttc ttcattcctta cccaaaggat tctgacaaaa tcctgcttgc aaggcagaca 60
 ggcttgacaa gaagtcaggc ctcgaattgg ttcattcaatg caagagtgcg tctctggaaa 120
 cctatggtcg aagaaatgta caaagaagag attggggatg cggaaatgga ctccaactca 180
 tcctccgaca cagccaagcc aaaaacagga gatatacaagt cctccatgga ggaccgggtg 240
 gaagaagtgc aacagagtgc aacagctaca cagagatgca gctcaggcca gctcatggac 300
 tcatcattcg accggactcc agatgtcgaa atggcaggcc actctgtggg attcaactac 360
 ctgaac 366

<210> 1242
 <211> 340
 <212> DNA
 <213> Eucalyptus grandis

<400> 1242
 cttcggcctc gtcgaccacc ggaatggcat gggcgctcgcg aacgccggcc tcgtgtactt 60
 cgacggccac ctcctcgcca tgtccgagga cgacctcccc taccacgtgc gcgtcacgcg 120
 ctccggcgac ctcgagaccg tcggccgcta cgacttcgcc ggccagctcg actctccgat 180
 gatcgccccc ccgaagatcg acccggcttc cggcgagatg ttcgccctcg tcaagtactt 240
 ccgattctcc aaggacggcg agaagtcccc cgacgtcgag atccccctgg ctgagccgac 300
 catgatgcac gatttcgcat accgaacgct ttgtcgtgat 340

<210> 1243
 <211> 684
 <212> DNA
 <213> Eucalyptus grandis

<400> 1243
 ctctctctcc ctctccccc taacgtttct ggccctcttc tttgtctgga caaaaagatg 60
 ggaagaaagt gctctcgctg tgggaacata ggccataact caaggacttg cacaactttc 120
 atgggggcag caagttcttg tgggctcaag ctcttcgggtg ttcaacttga cctatcttct 180
 tcttctctcc cttcatcatc agcatctagt ggttctgctc atccttattc acttgtcata 240
 aagaagagcc tcagcatgga tcgtctgtct tcttctctcg cctcctcctc gtctccatct 300
 tcctcctctc cctcgccaag agttcttgcg gatgaacact gcaataagac ctccctcgga 360
 tatctctctg atggcctcgc cgccagatcc caggagaaaa ggaaaggagt tccatggacg 420
 gaagaagagc atcgacatt cttaatgggg ctagagaaga tggggaaagg cgattggaga 480
 ggcattctca ggaactatgt gaccacgaga accccaaccc aagtcgcgag tcatgcgcaa 540
 aaattctttc tccggcaggc cagtcttaat aagaagaagc ggcggtccag cctcttcgac 600
 atgggtagtt ttcggtaacc atgtcacaaa tccatacatt aattgggcac caaactcacc 660
 gaaagaaaaac tcagagtctt ttca 684

<210> 1244
 <211> 329
 <212> DNA
 <213> Eucalyptus grandis

<400> 1244

cgcccccgca	gcttgggtcgg	cgtacctcag	aatgggtcga	aatgggttgt	ggttcctgcc	60
aaagattgat	ttcatatcag	ccaggagcca	aatatgtgca	atgcttatgc	tgcaagacga	120
ttaactttgt	gttgggaagag	catctggttg	gacaagttaa	gtgtggtaca	tgtgcatgt	180
tgcttatgta	cccgtatggc	gctccagcag	tcaagtgttc	ggcctgccgt	tctgtgacag	240
aaattgggga	gcacaacaaa	aggaccccat	gggcggtaca	gcaagggaga	cttccccctc	300
ccagtacagt	tccttgatgg	gcacacgca				329

<210> 1245

<211> 383

<212> DNA

<213> Eucalyptus grandis

<400> 1245

ctccaacgcg	cgccttcttc	tcttggaactc	ctctgagctc	tctccatctc	ctccggctcg	60
gcgcggccgt	cgctcgacgg	cgacgactcg	agggtttcca	tataattcac	ttgaaagaag	120
ctgcagaatg	ccgtggaaaa	caggacttac	cggctctaaa	acggaagaag	ataaggctct	180
gcagctttgt	cgggagagaa	aaaaatctgt	taggcaagct	gttgatggtt	ggggctccct	240
tgtgtatgca	catttcatgt	ttgtgcaatc	attaaggaac	gtagggacag	ctctcacaaa	300
gttctttgaa	acagaatctc	caaatgggtc	tccctcgat	gcctcaatga	gtacaacacc	360
tgagccaatc	gcattaaccg	aga				383

<210> 1246

<211> 380

<212> DNA

<213> Eucalyptus grandis

<400> 1246

gctcttcgaa	cactttctcc	accctaccc	gaaggattcg	gacaaagtca	tgctggccaa	60
acagacaggg	ctcactagaa	gccagggtgc	gaattgggtt	ataaatgctc	gagttcggct	120
ttggaagccg	atggtggagg	agatgtacac	ggaggaaatc	aaggagcaag	aacagaatgg	180
gggaggagca	gaggaaaaac	caagcaagag	tgaacgcgag	gactcagcat	ccaagtcctc	240
tggcctccag	gacaaggccc	ccaactccaa	tgagaacagc	accaagagct	tcaaaccaaa	300
ggagatcacc	tcgaggaacc	acgacacccc	tgccatctct	actaattcgg	cttctctccat	360
cgggggaaac	gtccgcagca					380

<210> 1247

<211> 360

<212> DNA

<213> Eucalyptus grandis

<400> 1247

gcagccgagt	cgagcaagaa	actaacgaac	gcccgggtgc	attaggattc	ataatccaca	60
agaacaaaag	aaaaaaggat	catgggaaga	tcccatgttt	gcgaaggcaa	tgccctgaag	120
aaagggccct	ggtcttctga	ggaagacaag	aagctccttg	attttatcca	gcagcacggc	180
catgggagct	ggatctctct	ccctaaacgt	gcagggtctta	atagatgtgg	caagagctgc	240
agattgagat	ggataaacta	cttgtggccg	gacatcaaga	gagggagttt	ctccccggaa	300
gaagaacaaa	ccatcttgca	tctccactcc	gtgctcggaa	acaaatggtc	ggcgatcgca	360

<210> 1248

<211> 351

<212> DNA

<213> Eucalyptus grandis

<400> 1248

tttttttttt	tttttttttg	aaagtaaacy	aatttaagat	taaattaaat	atgggggaacc	60
cagctagcta	gtcaagtttg	aaaatgttgt	gccaatctct	gtttctttta	tacaaagtgtg	120
gggaaaacaa	aatttacatc	cgtcaaat	tgaggtaaaa	aaaaacccta	tctcctccgg	180
ctttgacttg	tcagccgccc	tcaggttgac	ttgaatacca	ggttcacgc	accggcgggc	240
acaatctcct	gcgacgcggg	ctgggagtga	cgatgctccc	cctcgtagct	cacgatcagc	300
atcggtggat	cgtcgggggc	cctctccacg	tgtttcctcg	cggggcacc	t	351

<210> 1249
 <211> 419
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1249
 gacgagatga tgatgaagaa ggggagcgac ggagggatag cggaggtgaa tcccacgccg 60
 aagaaggggg tgacgtccaa ggttgtggac tacattgaga agctgatcgt gaagttcatg 120
 tacgactcct ctctgcctca ccaatacctc gccggcaact tcgctcccgt cgcgcacgag 180
 acccctcccg tcaccgacct ccccgtcgtc ggccatctcc ctgattgctt gaatggagaa 240
 ttcgtccggg tgggccccaa tcccaagttt gccccggtcg ccggatacca ctggtttgat 300
 ggagatggca tggttcatgg gatgcggata aaaaatggca aagctactta cgtctctcgc 360
 tatgtgagga cgtcgaaaact taagcaagag gagtactatg ggggagctaa atttatgaa 419

<210> 1250
 <211> 632
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1250
 cccccgcgca cgaccggacg gccagtcacg attccctcgc cgtcgccgcc gtgaaacgcc 60
 ggagcgcacg gcgcacggac ccgacggacg ccgtccctcc ccaccgtcgc cgaggttgag 120
 agccatgtcg agcgacgcgc gcgcgcgcctc cggcgccacc gccgcccggc ccggggagtt 180
 catgctgttc ggggtcaggg tgggtggtggt ggaccccatg aggaagagcg tgagcctgaa 240
 caacctgtcg gagtacgagc agccccagga cgcggccccc gccggcggcg gcgtcggcaa 300
 ggacgacgcg ggagcggccg cctccggcta cgcgtccgcc gacgaagccg tcgcgcacgg 360
 ctcgaaaggc gggccggccg cgagcgcaag cgaggagtcc cgtggacgga ggatgaacac 420
 cggctgttcc tgctcgggct acagaaagta ggaaagggcg attggagagg catttcgaag 480
 aactttgtga agactcggac gccgacccag gtcgcgagtc atgccccaaa atactttctc 540
 cgccggagca accttaatcg gccgtccgcc gccggactta gccttgtttg acatcaccac 600
 ccgatacggg cactggttgg tacaatgatg ga 632

<210> 1251
 <211> 202
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1251
 atgcgaaaca tgctcaaaca cccccaaat catgggaagg tggaaagtgg gctgattcgg 60
 aggttaacat gttgaaggat tacgcttcag aggactggat tacaggtgtt gaccgcttcc 120
 ggttgagctt ggttgaattt cttgataagt tgaataagta tcgggagtc tctgttcata 180
 tgtacgtgtc ccttgaaaag gc 202

<210> 1252
 <211> 378
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1252
 gagataaaga actactggaa tacaagaatt aagcgactgc aacgcactgg catgcctata 60
 tatccaactg aggtttgtct gcaagtgtca agtgagaatc aagaaactca taacatgggt 120
 aacttgcata ctgcaggcga agataattgt gatctctcac aggcagatcc actcgagatc 180
 ccagaggtgg attttagaaa actggaactg catcttggtt tctcgtcttt ttggtctaca 240
 cttctggacg ttcctccttg tggctttggg agagaggcaa tgtgtctatc tgatgcttac 300
 tgccttccat ttccatcaag ccggtctcct aaacgccttc ggggttctga gaccccat 360
 cctgtcttgg atgctgga 378

<210> 1253
 <211> 388
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1253
 gtgatttttag tgctcgatac tttgaaaagg gcatcaatac agtcaaacga gataaaaaga 60
 cataacatgc aaaactcaat acatgattct cagaaaagac catcatcttt aattcagtca 120
 aacgaggtcg tttttacgca aacttcggtc ataagctgtg ccttgcaatc gtttggttaa 180
 cctccaaatg ctaagggtcac gggtcacattc ctctctgac tttgagcagc tcatggcacc 240
 aacgtccaag gaacatttct taaaaaggat gatccaaaag ttaactgctct gattcaacaa 300
 gccgagctgc tcagttccct tgcggtgaaa gtcaatgcag ataacatgga ccagagtctt 360
 gaaaatgctt ggaagggctt ccaggaat 388

<210> 1254
 <211> 380
 <212> DNA
 <213> Eucalyptus grandis

<400> 1254
 cgacgatcgg gtcggggtcgg ttcggggcgtc gccatgacgc ggcgggtgctc ccactgcagc 60
 cacaacggcc acaactcccg gacctgcccc gcccgcgcg gcggcgggcg cgcgggggga 120
 ggcgggcgtga ggctcttctg ggtgaggctg acggacggct cgatcatcaa gaagagcgcc 180
 agcaccagca gcctctcgtc ccaccacctc ctccccccct cctcctcgcc gtcgccttcg 240
 ccttcgcccgt cgccgtcgcc ggccgcgggc tcgcccgcgt cgggcgacca ccactacgac 300
 caccaccacc accagcagcg cgaccgggac ggggtacttg cgcacgatcc cgcgcaaggg 360
 gectgcgcgt ccgatcgccg 380

<210> 1255
 <211> 350
 <212> DNA
 <213> Eucalyptus grandis

<400> 1255
 ccctcatagc gaaatgggta ttctcctcca caatatggca atggacctgc atatcacctt 60
 atgccaacat actaccgat gggctacagg atctgtgctg gatgcaatac agagattggg 120
 catggacggg ttttgagttg catgaatgct gtttggcac ctagaatgtt ctgctgccgt 180
 gcttgccccc tgccaatttc tgattatgag ttttctttat caggcaatta tccttaccat 240
 aaatcttgct acaaggaaca ctaccaccca aagtgtgatg tctgcagtca ctttatccct 300
 acaaaccttg ccggtcttat tgagtacagg gcgcacctt tttggagtca 350

<210> 1256
 <211> 377
 <212> DNA
 <213> Eucalyptus grandis

<400> 1256
 tctcaatggg attagcggaa agaagaacca ccagagggag gattcagaat ttgaagatga 60
 gaggagtaac aagcagacag cagtgtatgt tgatgacacc gagctatccg agatgatgga 120
 taaattggtg gtctgtcata ttaaaggcaa gagtcgagat tcaaagtctg atgaatcctc 180
 taaaaagaa gtaagtaaat ctttacagca gaatagacag acacacactg ctgatgggtg 240
 gaagtttcat aataagaaac caaccccaac cagcaatatg acagagatgg tggatctcag 300
 aactttggtg atcctttgtg cacaagctgt ctcttctgac gatcgaagga ctgctaata 360
 ctatctaagg cagattc 377

<210> 1257
 <211> 651
 <212> DNA
 <213> Eucalyptus grandis

<400> 1257
 actcgtggcg ctgtttcgag ctttctagct tccggaggag gagggctggg gttgagcgaa 60
 acttgagag gtcatgaatt cgacaaccac tcagtttgtg tcctctagaa ggatggggat 120
 gtatgacccg attcaccaaa ttggaatgtg ggacgagaac ttcaagcaga atggaaatcc 180
 taatgcgccg ccagctctga tcatacctat gcacgcgaat ttggacaacc agtcggagga 240

tactttctcat	ggatcacagg	atactgctgg	caagtatgag	caagaaacat	cgaaacctta	300
tgataagggtg	caaagacgtc	ttgccccaaa	ccgtgaggct	gcgcgcaaaa	gccgtctgcg	360
gaaaaaggct	tatgttcagc	agctagaagc	aagtcgtttg	aagcttatgc	agttagaaca	420
agaggttgac	cgagctaggg	aacaggggtg	gtacatggct	tcaggagtag	attcagctta	480
tccaggatat	ggtggatggt	taaattcagg	aatcggtgca	tttgagatgg	agtacgggca	540
ctggattgat	gaacagaata	gacaaatatg	tgagctgagg	gctgctttga	atgatcatag	600
aactgacgta	gagcttcgca	tcctcgtgga	aagtggcatg	aaccactatt	c	651

<210> 1258

<211> 311

<212> DNA

<213> Eucalyptus grandis

<400> 1258

gacgagatga	tgatgaagaa	ggggagcgcac	ggagggatag	cggaggtgaa	tcccacgccg	60
agaaggggggt	gacgtccaag	gttgtggact	acattgagaa	gctgatcggtg	aagttcatgt	120
acgactcctc	tctgcctcac	caatacctcg	ccggcaactt	cgctcccgtc	gccgacgaga	180
cccctcccgt	caccgacctc	cccgtcgtcg	gccatctccc	tgattgcttg	aatggagaat	240
tcgtccgggt	gggccccaat	cccaagtttg	ccccggtcgc	cggataccac	tggtttgatg	300
gagatggcat	g					311

<210> 1259

<211> 588

<212> DNA

<213> Eucalyptus grandis

<400> 1259

cctagctgaa	actattactc	ccactggttc	tctctctctc	tctctctctc	tctctcaaac	60
atggctgaat	tagattattg	ccaaacccaa	agcagccccg	gcgctgccgc	cacgcgctta	120
aagctcttcg	gcttcaacgt	ctccgatgag	gaagactcag	ccgtcagcga	ccccattact	180
gttggcgcg	acggcgggcg	cggcgggcgga	ggcggaagg	ccacgccgtc	gggctcgccg	240
gaaggcagcg	tcccgggtggg	gggcgggcggc	gagcggaagt	acgagtgcc	gtactgctgc	300
agggaaattcg	ccaactcgca	ggccctgggg	ggccaccaga	acgcgcacaa	gaaggagagg	360
cagcagctca	agcgcgccca	gctgcacgcc	agccggaacg	ccgcgcgtgc	gtcgtctcgtc	420
cggaaaccca	tcatctcggc	cttcgctacg	ccgcgcgaac	tgctggccac	cgtggggccg	480
gtggtgggtga	cggggggcggc	gcccacctcc	ccgtcctggg	tttacgttcc	gcgtggcgcc	540
ccgccttcc	aagtgtcgca	cggctgcgtg	ttcacgaccg	gccagggga		588

<210> 1260

<211> 620

<212> DNA

<213> Eucalyptus grandis

<400> 1260

tgaaaaatcgt	attgtcctct	ttcgtcttga	tgcggtgaag	aactaaaaga	aggagccaca	60
aacactgagg	aataaacctt	agaactacca	aataaggaga	gcccacggga	ctcgttttct	120
tgtatgccac	aacgggtccga	accttctttt	ggtgaggccg	gggagcaaac	tatcgtttct	180
tcgacgaggg	tattgacatc	cttcgaacca	cctgcaactcc	tctgtttccg	atccggccat	240
ggatgattga	gaaaagagtt	gagaactgat	gacgatgacg	atcttgcttg	ttgctgcttc	300
atatttgcac	gctggagaat	ctggtcgact	ttcggatgct	gcccacgaa	gctgcagttc	360
acctcggggt	gattaccgat	cagctgggtg	cacgggaagt	tcgtcttcgc	gttcctccct	420
cggagaagcc	aggccgcgct	gtcgtgaagc	aaggcggtt	cctcggcgct	attgaaagtg	480
cccagccaca	gcctcagctt	cagcgtggag	tccttgatct	cggcgaccca	tcttcccgaa	540
ggcctttgtc	tcaccccgag	aaaccttctc	attgcatcat	caccttccgc	tcttctcttg	600
atgttcttcc	tcatggctat					620

<210> 1261

<211> 562

<212> DNA

<213> Eucalyptus grandis

<400> 1261
gataaatcgt cttcaccagt acctccgcag gatcagacgg gtgttcatgt ttatcatcct 60
gattgggctg ctatgcatgc atactatggg ccaagagttg ctcttccgcc ttattataat 120
tctgctgtat catctgggtca tggctcctcat ccctacatgt gggggccacc acagcctatg 180
atgccaccat atggggccacc ttatgctgca atatactcac atggaggtgt ttatggacat 240
cctgcaattc ctcttactcc gactcccttg gctgcggaaa ctccataaaa gtcatctgct 300
aattctgata atggactggg gaagaagttg aaaagttttg aagggttgc aatgtcaata 360
ggcagtgggg gggatgcaga cagtgcgtgac gatgggactg ataaaagggtc atcacagagt 420
gcagactcgg gagactcaag tgatgaggat caatcagggg cagataaagc caggaggaaa 480
agaagccgtg aaggaacttc atccaatggc gatggaaaat ctgaagtgca aggaaagggt 540
gctggggagg tggtatgctgt tt 562

<210> 1262
<211> 384
<212> DNA
<213> *Eucalyptus grandis*

<400> 1262
gacgagatga tgatgaagaa ggggagcgac ggagggatag cggaggtgaa tcccacgccg 60
aagaaggggg tgacgtccaa gggtgtggac tacattgaga agctgatcgt gaagtcatg 120
tacgactcct ctctgcctca ccaatacctc gccggcaact tcgctcccgt cgccgacgag 180
acccctcccg tcaccgacct ccccgctcgtc ggccatctcc ctgattgctt gaatggagaa 240
ttcgtccggg tgggccccaa tcccagttt gccccggctg ccggatacca ctggtttgat 300
ggagatggca tggttcatgg gatgcggata aaaaatggca aagctactta cgtctctcct 360
atgtgaggac gtcgaaactt aagc 384

<210> 1263
<211> 381
<212> DNA
<213> *Eucalyptus grandis*

<400> 1263
ccgcgccact ccattcgcgc atctccgacc tctctctctc acgcggccac tgtcccgtcg 60
cgcgaattcg ccccgccgctc gtaggagacc gcacccctcg ccgcgcgggc gatggcccca 120
gcttcattcc ctgcgctagc aacgcatttc aatggaagta tgctaattgat actaactcat 180
ctggtgaaag tcacacacgt aatggaaggc cagcaggaga tgccagggga aggaatcaat 240
tacttcctcg ttactggccc aggataacag atcaagagct acaacaaatc tcaggagact 300
cgaactctgt aatcactcct ctgtttgaga aaatggtgag tgctagtgat gcaggtaaaa 360
ttggacgttt agtgctgcca a 381

<210> 1264
<211> 316
<212> DNA
<213> *Eucalyptus grandis*

<400> 1264
ccgagaagag gacccccaa aagagagggg ggaagccagg cctcgccgcg gacacgccgc 60
tgaaccacgt ggaagccgaa cggcagcgcc gggagaagct gaaccaccgc ttctatgcgc 120
tgcgagcggg ggtcccgaac gtgtccagga tggacaaggc gtccctgctc tccgacgcgg 180
tgctctacat caacgagctc aagtccaaga tcggcgatct ggagtcccag ttgcagagag 240
agtccaagag ggtcaaacag gaggtcaccg acgcaaccga caacctgagc accaccacct 300
ccgtcgacca tagtag 316

<210> 1265
<211> 356
<212> DNA
<213> *Eucalyptus grandis*

<400> 1265
tcagggtccc acgcggttcc attcgcgcgt ctccgacctc ctctctccac gcgggccactg 60
tcccgtcgcg cgaattcacc ccgcgcgtcg aggagaccgc atcctacgcc gccgcggcga 120

tggcggcgcc	acgaggagat	gccaggggaa	ggaatcaatt	acttcctcgt	tactggccca	180
ggataacaga	tcaagagcta	caacaaatct	tggagactca	aactctgtaa	tcactcctct	240
gtttgagaaa	atgttgagtg	ctagtgatgc	aggtaaaatt	ggacgtttag	tgctgccaag	300
aaaatgtgcc	gaggcctatt	ttccgcctat	ttcccagcct	gaaggattgc	cgctca	356

<210> 1266

<211> 360

<212> DNA

<213> Eucalyptus grandis

<400> 1266

gcgcgcacga	gacatgggac	gatccccctg	ctgcgagaag	gcgcacacca	acaagggcgc	60
gtggaccaag	gaagaggacc	agcgccctcat	cgactacatc	cgccctccacg	gcgaagggtg	120
ctggcgctcc	ctccccaaat	ctgccgggct	tctcagggtgc	ggcaagagct	gcaggctcag	180
gtggataaac	tacctccgcc	ccgacctcaa	cgccggcaact	tcaccgagga	agaagacgag	240
ctcatcatca	agctccacag	cttgctcggc	aacaagtggt	ctctgatcgc	ggggagattg	300
cccgaagaa	ccgacaacga	gatcaagaac	tactggaaca	cccacatcaa	gcgcaaagct	360

<210> 1267

<211> 375

<212> DNA

<213> Eucalyptus grandis

<400> 1267

cgcccacccc	tcctcgagc	ccagcgctgc	cgctcacttc	agtcaagggg	taccctgccc	60
gcaacagcat	ttccgagtat	gacccgcgaa	ggcgtaactc	aattcccgca	gaatacttta	120
ctatgggctt	tactccctct	gtccccattt	acctcccat	ctctccactg	caccctcca	180
cacaactccc	tgtgtgtagc	caggctcggc	cctcgggtga	gtccaaaggg	gacccaagaa	240
agaagtacca	atgtgccgcc	tgcccgcgtg	catttgccag	ggcttacaat	ttaaagaccc	300
acatggcaac	gcatgacccc	aacaggctga	agccccatgt	ctgcccccat	cgttcttgcg	360
gccgttcctt	cagca					375

<210> 1268

<211> 567

<212> DNA

<213> Eucalyptus grandis

<400> 1268

gacgagatga	tgatgaagaa	ggggagcgac	ggagggatag	cggaggtgaa	tcccacgccg	60
aagaaggggg	tgacgtccaa	ggttgtggac	tacattgaga	agctgatcgt	gaagttcatg	120
tacgactcct	ctctgcctca	ccaatacctc	gccggcaact	tcgctcccgt	cgccgacgag	180
acccctcccc	tcaccgacct	ccccgtcgtc	ggccatctcc	ctgattgctt	gaatggagaa	240
ttcgtccggg	tgggccccaa	tcccaggttt	gccccggtcg	ccggatacca	ctggtttgat	300
ggagatggca	tggttcatgg	gatgcggata	aaaaatggca	aagctactta	cgtctctcgc	360
tatgtgagga	cgtcgaaaact	taagcaagag	gagtactatg	ggggagctaa	atztatgaag	420
attggagacc	ttaaagggct	ttttggttta	ctcatggtca	atatgcaaat	gctgagagca	480
aaactgaaaa	tactagatgt	ttcatatgga	acagggacag	gcaatactgc	actcgtatat	540
caccatggaa	aactgttggc	gctttca				567

<210> 1269

<211> 567

<212> DNA

<213> Eucalyptus grandis

<400> 1269

tcgccaccta	atgcattgcac	tgaatctgca	gttgccacca	ttagacccaa	aacgggtgagg	60
tttaagccag	tgccaaatcg	agctccaaact	gcagtgaatt	catcccaggc	agaagtctct	120
ggaacagcaa	ccggcaattc	caatgataag	gcttttaaagt	cagatgaaaa	gcctaccgta	180
atatacaaac	cattggcaaaa	gcttgtctca	aggccaaccg	tctcgctctt	ggctaataatg	240
ggaagcttca	atatggctca	ccatcaaaaa	ttgtcagttg	ccgaagcacg	tgtaaataatct	300
caactgcagg	acaaaaaaca	ttcgagatcc	cagcctattg	gaaatctcca	tcggagtgtc	360

tcttcacaag	cagatatgga	tgggacaagt	gaacccttga	gattggcctc	ccagaacatg	420
gaagaagaca	cgagaacttc	accggccttg	aacatggatc	gcccttctta	cgatggatat	480
aattggagaa	aatatgggca	aaagcaagtc	aagggaagcg	aatatcctag	aagttactat	540
aaatgcacac	acccaaactg	cccgggtg				567

<210> 1270

<211> 325

<212> DNA

<213> Eucalyptus grandis

<400> 1270

gcgggggtgta	cgcccggaac	ggcgccaacc	cgctccacga	gccggtcgcc	gggcaccact	60
tgttcgacgg	cgacggcatg	atccacggcg	tccggttctc	cgccgggtca	gtgagctacg	120
cctgccgggtt	caccgagacg	caacgcctga	tccaggaacg	gggcctcggc	cgccccgtct	180
tccccaaaggc	catcggcgag	ctccacggcc	actccggcat	cgcgcggtc	atgctcttct	240
acgcccgcgg	cctcttcggc	ctcgtcgacc	accgtaatgg	catgggcgtc	gcgaacgcgg	300
gcctcgtgta	cttcgacggc	cacct				325

<210> 1271

<211> 365

<212> DNA

<213> Eucalyptus grandis

<400> 1271

cacaggcgcg	atcgggccaa	gcgagcgctc	cccccgggaa	ttcagaaccc	agccgcgcgg	60
ccccgcggcc	ggcagccgcc	gtctcggcg	ccctctccg	gcacctccga	cgccgcgcgc	120
gtccggagca	ccctcgaccc	ttcgattcgg	aggctgggtc	gctgaggctc	gaggcgacgc	180
gaattgttat	cgatagctat	gcagagtcaa	cttgtctgta	atggctgtcg	aagcattctt	240
ctttatccaa	gaggggctac	aaatgtttgc	tgtgcattat	gtaacacaat	aacctctgtt	300
ccttctcctg	catatgtagg	tgcagatatg	gccagctta	tatgtggagg	ttgcaggaca	360
ctgct						365

<210> 1272

<211> 365

<212> DNA

<213> Eucalyptus grandis

<400> 1272

accgtgcccc	cgatgcaaca	gcattggatac	caagttctgt	tactacaaca	actacaacct	60
gaatcagccc	aggcacctct	gcagaaagtg	ccaacggtac	tggactgccg	gaggaacgat	120
gaggaacatc	cctgttggcg	ctggccgtcg	taagagcaag	aattcgtatg	cagccacggg	180
ggcactgttt	cacaacacgg	gagtacctga	atctcttcga	gctgattgtg	ctggtgattt	240
gaaaaccgcc	ggaaccacca	tcctgaggtt	cggttcagat	tctcctaatt	ggggtcaatc	300
tgcagctcca	gtgccaaagta	ctataaacgg	atttcttgat	cctggacgaa	caattccatg	360
ttctg						365

<210> 1273

<211> 328

<212> DNA

<213> Eucalyptus grandis

<400> 1273

aacaaatcag	nggaagaaaa	tatgcagcat	ttgaaggacg	aagctgcgaa	catgatgaag	60
aagatcgagc	tcctggaaga	ttcaagaagg	aagctccttg	gtgaagggtc	aggatcatgc	120
tcgatagagg	aactgcaaca	gatagaacag	cagctagaac	ggagtgttat	cagcattcgt	180
gctagaaaga	ctcaggtctt	caaggagcag	attgacaagc	ttaaagagaa	ggagaagatg	240
ttgacagctg	agaatgcaat	cttaactgag	aagtgtggaa	tcaagcccc	acaaagagca	300
aatgagtgc	gggatagtc	acttctca				328

<210> 1274

<211> 390

<212> DNA

<213> Eucalyptus grandis

<400> 1274

cttaccgagc	actccccctcc	tgattctaac	tcgtccattt	tcgttggttag	cagtacatca	60
ttggctaata	agcctaaata	cagagatatc	caagcaagag	aagccacaag	tggttcatcc	120
cgccaacact	cagatgaaga	tgatgctgcg	acagtggcag	atccaagcga	acagagcaga	180
tatcctactg	atcccaagcg	aattagaagg	atggtttcca	atagggagtc	tgctagaaaa	240
tcacgtaaaa	ggaaacaagc	acacttagcc	gaacttgaaa	tacaggctga	ccgacttaga	300
ggagaaaagt	ctactttggt	taagcaacta	ttagatgctg	cacagcacta	ccgccatgct	360
gatacaata	atcgagtgt	gaaatctgat				390

<210> 1275

<211> 384

<212> DNA

<213> Eucalyptus grandis

<400> 1275

gaattacacc	caaccaaacc	aaaagagtca	taattcagga	tccaccttgt	ttagttaagc	60
aagaataatt	ttcccttccc	ttttctcttt	ttgagccctt	tagagttaca	tgtcttgggt	120
agcaatgacg	gggaactttg	ggtggggctc	aaactccatg	gaagaggcgt	ggaggaaagg	180
tccctggact	gctgaggaag	acaagttact	cattgagtat	gtgaagttgc	atgggggaagg	240
aagatggaac	tctgtagcta	ggctcacagg	gctcaagagg	aatgggaaga	gctgtagatt	300
gaggtgggtg	aattacttga	ggcctgacct	gaagagaggt	cagataaccc	ctcaagaaga	360
gagcgtcatc	ctagactccc	gcta				384

<210> 1276

<211> 382

<212> DNA

<213> Eucalyptus grandis

<400> 1276

gtcgaccgag	tggaagagag	gttggccctt	ccgatctggt	caactcgcca	ccctctgcga	60
taagtgcggg	tctgcatttg	aacaggccac	gttttgcgaa	gttttccact	cgaaggactc	120
cggatggagg	gagtgcgctt	cctgtggcaa	gcgcctgcat	tgcggatgca	ttgcttcgag	180
gatgctgctg	gagctgctcg	attgtggcgg	gatcaactgc	gcgacctgtg	cgaaaagtcc	240
aggacttctg	cctatcgcaa	gtgatgagag	gcctagttag	tttggcatga	ttaatgttcg	300
tactggtgaa	ctgcaatcta	gtaccacaga	caaccatttc	gatagcgacg	aggttgataa	360
actgaagctt	attcgattga	ga				382

<210> 1277

<211> 367

<212> DNA

<213> Eucalyptus grandis

<400> 1277

ataagatcgg	atcttttctg	ctttggcgac	gccggaaacc	cgaattcagt	gccccaaacag	60
tagtcgaccg	accgaccgac	cgaccgggaa	gttccgatca	tggccgtgga	gatgtttcaa	120
gagccggagt	cggcggttct	cgactccgtc	cggcggatcc	tgctgtcgga	ggactccgag	180
tgccggttct	tcgagccgac	gccgcccgcg	accgggaact	tctgcggcgc	cggagccccg	240
gtgatctgcg	ggagctccag	cttcagcagc	ctgtacccgt	gcctgaccga	gaactggggc	300
gagttgccgc	tcaaagaaga	tgaccgggaa	gacatggtcc	tctacggcgt	ctccgcgacg	360
ccctcac						367

<210> 1278

<211> 384

<212> DNA

<213> Eucalyptus grandis

<400> 1278

cacgctcatc	ggtctgccag	aaactcacgg	agagagagag	atggcggaga	gagaggagaa	60
------------	------------	------------	------------	------------	------------	----

ggggaagtac	gacgagatga	tgatgaagaa	ggggagcgac	ggagggatag	cggaggtgaa	120
tcccacgccg	aagaaggggg	tgacgtccaa	ggttgtggac	tacattgaga	agctgatcgt	180
gaagttcatg	tacgactcct	ctctgcctca	ccaatacctc	gccggcaact	tcgntcccgt	240
cgccgacgag	acccctcccg	tcaccgacct	ccccgtcgtc	ggccatctcc	ctgattgctt	300
gaatggagaa	ttcgtccggg	tgggccccaa	tcccaagttt	gccccggtcg	ccggatacca	360
ctggtttgat	ggagaaggca	tggt				384

<210> 1279

<211> 368

<212> DNA

<213> Eucalyptus grandis

<400> 1279

cacggcgccg	ccgccgggtt	tcttggggccg	agggccgtgc	cgatgaaaca	ggcaggtctc	60
gcccagaagc	ccacgaagct	gtaccgggga	gtgaggcaga	ggcactgggg	gaagtgggtg	120
gccgagatcc	ggctacccaa	gaaccgcacc	cgcctctggc	tcggcacctt	cgacacggcc	180
gaggaggccg	ccctcgccta	cgacaaggcg	gcgtaccggc	tcgggggtga	tttcgcgcgg	240
ctcaacttcc	cgcacctcaa	gcacaagggg	tcgcacatcc	agggcgactt	cggcgactac	300
aagccgtccc	attcctccgt	ggacgccaa	ctccaggcca	tctgccagga	catggccgag	360
aaaccagc						368

<210> 1280

<211> 341

<212> DNA

<213> Eucalyptus grandis

<400> 1280

gtcaactcgg	tgttcgagct	gcacaagctg	ctggcccggc	cggggcgat	cgagaaggtt	60
ctgggcgtgg	tcggcgaggt	gcggccggcg	atcgtgacgg	tggtcgagca	ggaggccaac	120
cacaacgggc	cggctctcgt	ggaccgcttc	aacgagtcgc	tgactacta	ctccaccttg	180
ttcgactccc	tggagggtcg	cgccagcacg	caggacaagg	ccatgtcgga	ggctacctc	240
gggaagcaga	tctgcaacgt	ggtggcgtgc	gagggcgccg	accgggtcga	gcgccacgag	300
accctcgccc	agtggcgggg	ccgcctcggc	ggcgccgggt	t		341

<210> 1281

<211> 295

<212> DNA

<213> Eucalyptus grandis

<400> 1281

tgactttcaa	tgagtttcag	aacacatgga	gtggactttc	taaggatatt	ggatccatca	60
acatggatga	gttcctgaag	aacatatgga	cagctgagga	gagccaacta	cagctacaag	120
acatggcgcc	ttctggtaat	ggaggggaag	gaggtggtca	agtagggaat	ttgctgagac	180
aggggtcatt	gactctgtcg	cggactatta	gtcaaaaaac	agttgatgaa	gtgtggagag	240
aattattcaa	agagacggag	gatgtgaaa	aaggagtag	agaaggaggt	gacat	295

<210> 1282

<211> 365

<212> DNA

<213> Eucalyptus grandis

<400> 1282

tttttttttt	ttttcaagct	aagatcaaac	caaaattaaa	aaagaatttc	acagtatttt	60
tatgcaaattg	caatgacacc	ttatcaaggt	ttaccaaattg	ttgaaacaaa	ttatacacac	120
ggcctgaggc	atccatgaaa	tcacgcaggc	aaaaccgcg	gctcattttc	acgactgcct	180
acctgctcgc	gggggttatt	caaagcctcg	aataccttag	tgcaagcacc	tgagaattcc	240
atcaatgcct	taaaaacgcg	aggcaggccg	ttcttgaggg	ggttcagtgc	catggccttg	300
gtgaactcga	ccgaaaccgc	atacttggcn	ttcacatcgt	ccaaccgttt	tttnagggcc	360
tcgat						365

<210> 1283

<211> 428
 <212> DNA
 <213> Eucalyptus grandis

<400> 1283
 ctccggcgag ctcaaactgt tcatgaccac gtcgccgtcc tcgtaatcct tcgcactgat 60
 ctcttcgccc ccaccgcctg cccctcggc ctctccact tctcccctg ctccccatt 120
 gccaaacgcc ctccgccct ctgccgcgc tgccgtatc tctgctgct ccgtggactc 180
 cggcacgcgg agccgccatg ccgagtcggc gaaattgagg cacgcgccc gcccgcgag 240
 cgccagcgca gccacgtcgt gggcccgggc ggccatctcg ggggtcgggt acgtcccag 300
 ccatatccgg gtcttcttgt tgggctccc gagctcgac acccacttgc cgttggtcct 360
 ggcgcggacc ccccggtaca cggggtggcg ggtctccttg aacacgaccc gcccgggccg 420
 cttcttcg 428

<210> 1284
 <211> 532
 <212> DNA
 <213> Eucalyptus grandis

<400> 1284
 ggaaaagaga aggcagcttt cccgtataaa acccaaacc ctccaaattc tcccccaat 60
 tctccagcca gggaaggcg agggcgcgca cggcgacggc gacgatcatc ccatctccga 120
 ccagctgatc cttccgctcc atcgctcgta tgtacggacg ggccggcgag tggagccgct 180
 acgaggacaa ggtcttcgag cacgcgctgg tggcggtggc ggaggactcg cccgaccggt 240
 ggcagctgat cgggaaccgc ctgaaccggt ccgcgtcgca agtggttcgag cactaccaga 300
 ggctggtgga ggacattgac gcgatcgagt cggggcgggc cgagccgccg agctaccgcg 360
 acgaccacc ggcgagctgc ggccagattg ccttcgagac gaagccccgg atcaaggagg 420
 cggagaagaa gaagggcaac ccgtggaccg agggaggagca caggttattt ttgctcgggc 480
 tgcagaccta tggcaagggc gactggagga gcatctcgag gcactttgtc ct 532

<210> 1285
 <211> 349
 <212> DNA
 <213> Eucalyptus grandis

<400> 1285
 aaagtcccga gatgccgcga cgcgaattcc cctctcgaat gcgctcggaa ttcgagcgat 60
 gatcggagcg gcgaccaacc agatcccgc gccgcgcgc ccgcccagc cgagcaagc 120
 cgcgccgcgc gccgcgcga tccggttccc cgactccgtc tacaacgcgc tcagggtggg 180
 cgccgtcttc cagcggctgt cgaagcacct cgccaccatc ggcaagggt ccggcctgtc 240
 ggcattcttc ggtacttcca tggagtctct gaactcgtgc ctctgcctcg ccagaggcat 300
 tgactatgcg gtgcgcaaca atgaggttct gcccaaagct cacgaattg 349

<210> 1286
 <211> 350
 <212> DNA
 <213> Eucalyptus grandis

<400> 1286
 cttctgcgag ctagggtttc tctcgtcct cctctctct aggcctgat ttctcctccc 60
 ctcgatcggc gacgtcgccg tcggttcggc tctccggtag ctctgctcc tcccggcttt 120
 catggaggct aaggtgatgg aagacgctag caagtccgag gctcactcca tatcggtgc 180
 ggccttcgtg gaaggtggag tccaagaggc ctgcgaggat gcttgagca tctgccttga 240
 agctttctgc gacagcgaac catctacggt gaccacttgc aagcacgagt atcatctcca 300
 gtgcattctc gagtgggtgc agaggagtcc acagtgtccc atgtgttggc 350

<210> 1287
 <211> 344
 <212> DNA
 <213> Eucalyptus grandis

<400> 1287
gaaggttgga acatctgggtg gagcaggccc ttgtcctgca aacagatgca tgtatgcttc 60
ataactctat agatatggaa atgtcactgt aactgatca tcaatgtggg aaagaacaca 120
tcccctgtcg aactttgcag atttttacaat cacataatga tgaagtttgg cttgtgcaat 180
tttcacataa tgggaaatat ttagcttctg catccaatga tcgatcagca atcatttggg 240
aggttgatga gaatggcagc gtctcattga agcataaatt gactggtcac cagaagccga 300
tttcttctgt ctgttgaggt ccagatgacc gacagcttct cact 344

<210> 1288
<211> 359
<212> DNA
<213> *Eucalyptus grandis*

<400> 1288
aacatcttct ggctaagcgc gttcagcatc actctcaact actggcgtga agatgttcaa 60
aggcaaactt tcttatctca gaggctaaaa gatgttccac ccatggcttc ttaatctgat 120
ccagatgaac cgtggagaaa caaaatcgaa gtctcatcaa aaggatcctg attgacctaa 180
gaatgacaag gcaaccattc ttacggacaa aatccagggtg ctgaaggatt taactacgga 240
agttaacaaa ttgaaagctg aatgtgcagc tcttattgaa gaatctcgtg agctgatgca 300
ggagaagaat gagctcagag aagagaaatc atctttaaaa tctgaagttg aaaatctta 359

<210> 1289
<211> 381
<212> DNA
<213> *Eucalyptus grandis*

<400> 1289
tggatccaaa gaattcggca cgagggtgcc tccaccacca ccgccgtccc caccgcgcgc 60
accaccacca ccaccaccac caccacctta tactgtacaa ataatccctt ggcctcggcc 120
gttatagcct ctactcaaaa aatcagtttt tacccttttc tgttgcgtag tcgtagtttt 180
gggccagggg ttctattcgg tatatgtaga gaagtcagtg ggcgaaaccg agcgtcgagc 240
ggtcggccat ggcttctct tcttctgtag ctccgcgag gaaggacgcg gatcggatca 300
agggggccgtg gagccccgag gaggacgagg cgctgcagag gctgggtccag agctacggcc 360
cccgcgaactg gtccctgatc a 381

<210> 1290
<211> 330
<212> DNA
<213> *Eucalyptus grandis*

<400> 1290
ttccaatctt cccttccctt cccatcgca cctctccaaag attccacctt tcgtctctct 60
ctctcgaagc ccaaaccctc tcgatctata ttgccctcct ctccctcgtt catccctcgc 120
aaaaccagac ccccggtatc gccccgaaag aaggtcggac aagcaagatg gcggaagagc 180
accggtgcca ggccccgcgc ctctgcgcga acaactgcgg cttcttcggc agccccgcga 240
cgcaggattt ctgctccaag tgctaccgcg acctccagct caaggagcag cagtccctca 300
acgccaagct cgctttcaac cagacctgt 330

<210> 1291
<211> 296
<212> DNA
<213> *Eucalyptus grandis*

<400> 1291
gcagccgagt cgagcaagaa actaacgaac gcccgggtgtc attaggattc ataatccaca 60
agaacaaaag aaaaaaggat catgggaaga tccccatgtt gcgaaggcaa tggcctgaag 120
aaagggccct ggtcttctga ggaagacaag aagctccttg attttatcca gcagcacggc 180
catggagctg gatctctctc cctaaacgtg caggtcttaa tagatgtggc aagagctgca 240
gattgagatg gataaactac ttgtggccgg acatcaagag agggagtttc tccccg 296

<210> 1292

<211> 355
 <212> DNA
 <213> Eucalyptus grandis

<400> 1292
 gccaaagacc tggccggcca caaggcgccc atctccgccc tcaagttctc gccggacggc 60
 aacctcctgg cctcctcctc cgccgacaag accctccgcg cctactccac cgcctccctc 120
 gccccgctcc acgacttcca cgccactcc cagggcgtct ccgacctggc cttctccggc 180
 gacacccgcc tcctcgccnc gcctccgacg acaagaccct ccgcctctgg gacgtcccca 240
 cggggaccct cctcaagacc ctacacggcca caccaactac gccttctgcg tcaacttcaa 300
 cccccactcc aacctcctcg tctccggctc cttcgacgag accgtcccgc gtctg 355

<210> 1293
 <211> 362
 <212> DNA
 <213> Eucalyptus grandis

<400> 1293
 cccctctacc ccccaagccc cccaagccgt cctcgtccac cctcagctcc cgcgcgccgg 60
 ccattcaagt cgcggtcccc gggcgacga gcttctggc ggcgcccggc gtcccccg 120
 ccgagccgtc gggctccgct ggcggcgacg acgacaagca ctaccggggc gtgcgcggc 180
 ggcgtggggg aagttcgcg cggagatacg cgacccgacg cgcaagggga cgcgcgtgtg 240
 gctggggacg ttcgacacgg cgggtggaggc cgcgaaggcc tacgaccgcg ccgcgtttag 300
 gctccgcggg agcaaggcca tcctgaactt cccgctcgag gcgggacgcg acgagccgac 360
 gt 362

<210> 1294
 <211> 360
 <212> DNA
 <213> Eucalyptus grandis

<400> 1294
 ctctgccgaa ccggagaggg gccgacaaat gaaaaggagg cggaggagga gatgacgatg 60
 ccgatgccga tgccgatgat ggaccggatt agcccgtaga gaggaatcgg attgctttgc 120
 cggaacaaga gatttcgcga cgacgacgac gacgacgac acgaataggg agggaaaaaga 180
 tgccgacgat ctgcgacgtg tgcgagaatg ctgccgcgat cttcttctgc gccgccgacg 240
 aggccgctct gtgcgcgct tgcgacgaga aggttcattc gtgcaacaag ctggcgagtc 300
 ggcgatgtgcg cgtcgggctc gccgatccta gtgaggtcca acgttgcgat atatgtgaga 360

<210> 1295
 <211> 344
 <212> DNA
 <213> Eucalyptus grandis

<400> 1295
 cgtctcctcc gtcaccctct ccctcttctt cctcttctac aagcaccggc cccactatgc 60
 tggcccgaac ctcccccg gcagcatcgg cctcccgttc atcggcgaaa gcctcgactt 120
 cctctccacc ggggtggaagg gccaccogga gcggttcatt ttcgaccgga tcgcccgcta 180
 ctctcccccac gtcttcaaga cttccctcct cggggagccg gccgccatct tctgcggcgc 240
 cgccggcaac aagttcctct tctccaacga gaacaagctg gtggtctcgt ggtggcctaa 300
 ctccgtcaac aaggtcttcc cttcctccac ccagacctcc tcca 344

<210> 1296
 <211> 287
 <212> DNA
 <213> Eucalyptus grandis

<400> 1296
 gttactacga gagacaaacc aactttgctc ctcgctccatc caagattgcc aacctgggtg 60
 cccttggtct gttctccttt gcacgacga cgttcattct ctccctctac aacgtcaatg 120
 cgcgtgacgt aaccaccccc aatgttggtg tggcatggcc atcttctgtg gaggccttgc 180

tcagctcctc	gctggcatgt	gggagtttcc	tcgcggaac	acctttggag	caacggcttt	240
ttcctcatat	ggcgcatttt	ggatgtcggt	tgctacgatt	tatatcc		287

<210> 1297
 <211> 557
 <212> DNA
 <213> Eucalyptus grandis

<400> 1297						
ctctctccct	ctctctctct	ccctctgcaa	gtgctggctg	ctcagatggc	tgaagcgaga	60
gcacatgggt	tcgtctacgc	cagcaagaag	aggccggggt	ccgatgatgc	cgatggcggc	120
gaggacgcga	tggtgggtggc	caagaaacag	atgatctccg	gccccgtggc	gggggtgtgg	180
gaggacccag	cggaatgtcc	gccatatcat	cggtgctgat	gcagctgtgc	agcagcggcg	240
gacacatcgt	ggcgtcccag	gcgctgtacg	gcgggaccca	cgccctcctg	acccacttcc	300
tcccaggggc	gtgcaacatc	acgacgacgt	tcgtggacat	ccgggaccac	ggcgcggtgg	360
cggccgccgt	ggccaggggc	cggaccaagg	tgctctactt	cgagtcgcgc	tgaacccga	420
cgctgaccgt	cgccgacata	ccggagctct	gccggctggc	ccacgacaag	ggcgtgacgg	480
tggtcgtnga	caacacgttc	gcgccgatgg	tcctgtcccc	ggcccgggtc	ggcgccgacg	540
tggtgggtgca	caacatc					557

<210> 1298
 <211> 500
 <212> DNA
 <213> Eucalyptus grandis

<400> 1298						
gggcatacta	aggcaatcga	ttctgtgtgt	tgggattcta	ctggcgattt	aattgcgtct	60
gtcagtgaag	actctgttag	agtttgggca	gttgggtctg	gtagtgaatg	ggactgtgta	120
catgaattga	gctgcaatgg	aaacaaggcc	cactcctgcg	tgttccaccc	aacttatcct	180
tcacttttgg	tgattggctg	ctaccanacc	ctggagctct	ggaatatggc	cgagaacaag	240
acaatggctt	tgccagctca	tgacggacta	atttcagcat	tagcagtatc	aaatgtgacg	300
ggcctgggtg	cttcagctag	tcacgacaag	acagtgaagc	tgtggaagtg	atactttggc	360
atctccaggt	atthttccta	agcactcaga	ttggaagact	gaaatcgctg	ttcccatcaa	420
agtgcagtga	tcttgtcctt	gtatcaagtt	gcctcagtag	gcccagttgg	tgtecggtctc	480
actgatacta	atthtatagct					500

<210> 1299
 <211> 444
 <212> DNA
 <213> Eucalyptus grandis

<400> 1299						
gagacacacc	ccgcaatcta	ccggaggcgc	cacgaccttg	tgagcgcacg	ggcttgcctg	60
ttcgatcttg	agtcatgagg	ctcctgtgcc	tgctcgcgtt	gatcccgcctc	gtcgcagcgg	120
agtgcacgtg	cgagagcgat	cccaggaac	gcaacaggac	ccgggcccctc	aagtacaagc	180
tggcgcccat	cgatcgcgat	ctcgtggcgg	gcgcggttgg	ggtgtgcctc	ccgatcggtg	240
ggaagaccgt	cccggctctg	cacccggaga	ggagtatctt	cttcatcatc	aaggccttcg	300
cggccggggg	gatcctgtcc	accgggttca	tacacgtcct	cccggacgcc	ttcgagaact	360
tgacgtcgcc	gtgcctgagc	gagaccccgt	ggggggattt	cccgttcgcg	gggttcgtgg	420
ccatgctcgg	cgcactcggg	acgt				444

<210> 1300
 <211> 547
 <212> DNA
 <213> Eucalyptus grandis

<400> 1300						
ggaagctcta	gggttgtgaa	gtacattctc	gaatctggca	aagtcgatgt	aaatagggct	60
tgtggttcgg	acaaggtcac	tgcccttcac	tgtgctgttg	ccagtggctc	tgttctctgcg	120
gtggaggttg	tcaagctctt	gcttcacgca	tctgccgatg	ctaattgcat	tgatggcaat	180
ggaaagaagc	caattgatgt	gatagccctt	ccattaaagt	cacgcggcga	ttcaaggagg	240

aagctgatgg	agctgttgct	gaaaggcgat	aattctgatg	gggaatttga	atcccacgag	300
gagaagccga	ttgccgcacc	gcaagcatcc	aaagagggaa	gcgaaaagaa	agagtatcaa	360
tttctgttg	atatctctct	gcctgacata	aatgttggga	tttacagtac	tgatgagttc	420
agaatgtatg	ctttcaaagt	aaagccttgc	tcgcgggcat	actcccatga	ctggacagag	480
tgcccatttg	ttcatcctgg	cgagaatgcg	aagaggcggg	accctccaag	taccctaca	540
actgctg						547

<210> 1301

<211> 483

<212> DNA

<213> Eucalyptus grandis

<400> 1301

cttcgagttt	ctttcttcac	tagaattcgc	tcccgagtct	gttggttgctc	gtgtagtttt	60
gcttactccg	tccttcgttt	agctcgctga	ccagcgcgga	gctaggagcg	gtcgctaaag	120
gattactcgt	acaaaacgta	aactcagctc	tgccaatttt	cccatggagg	gggaatctta	180
cttcgagaaa	gatgaaaaat	attctaattg	ctcaatcttg	ctcgaattat	ctgcttcgga	240
cgatctccca	gcttttgaaa	ggaaagcgaa	agagaagggc	tgtaacattg	atggtgctag	300
cttctggtac	ggtagaagaa	ttggctcaag	gaagatgggt	cttgaagaga	ggactcctct	360
catggtggct	tccttggttg	gaagctctag	ggttgtgaag	tacattctcg	aatctggcaa	420
agtcgatgta	aatagggctt	gtggttcgga	caaggctcact	gcccttcact	gtgctgttgc	480
cag						483

<210> 1302

<211> 368

<212> DNA

<213> Eucalyptus grandis

<400> 1302

ctttcttttg	cttcccgtta	atccctatgt	cgttatcaac	actttaaaag	tcgggtgaaca	60
gtttaaaatt	ggaatgcata	ggaagtagta	gttcgacaat	ttcaactttc	aggtgctttt	120
tgggaaaaaa	attcaatatg	agaagatggg	taaaatttgt	tgcaattcat	tttcagggat	180
gctgcggtgg	tttgcatgtt	ggcgacgtgc	ttgttcttaa	tcttgacagt	atggtttgga	240
gaactcttgc	gaccaccggc	caaggacctg	gcccagggga	cagtcacagt	gctgttcttg	300
tggggcacag	gatggttgtg	tttgggggta	ccaacggctc	tagaaagggt	aatgaccttc	360
atgtactg						368

<210> 1303

<211> 348

<212> DNA

<213> Eucalyptus grandis

<400> 1303

ccgagctggt	gatgtcgtcc	ggcctcgtct	gcaacgacgc	cgtcagctgg	gtcacgttcc	60
acagcgcta	cgacttcggg	tacctgttca	aggccctcac	ccgcccgcag	ctccccggcg	120
acctcccga	gttcttcgcc	gtcgtgcggg	tggttcttcg	ggaccgggtg	tacgacgtga	180
agcacctcat	gcggttctgc	cacagcctgc	acggcgggct	ggaccgggtc	gccgccgccc	240
tggagctgga	ccgggcggtc	ggcaagtgcc	accaggccgg	ttccgacagc	ttgctgacgt	300
ggcaagcggt	caggaagatt	agggacgtct	acttcgcca	cgacgacg		348

<210> 1304

<211> 349

<212> DNA

<213> Eucalyptus grandis

<400> 1304

tgactttcaa	tgagtttcag	aacacatgga	gtggactttc	taaggatatt	ggatccatca	60
acatggatga	gttcctgaag	aacatatgga	cagctgagga	gagccaacta	cagctacaag	120
acatggcgcc	ttctggtaat	ggaggggaag	gaggtggtca	agtagggaat	ttgctgagac	180
aggggtcatt	gactctgtcg	cggactatta	gtcaaaaaac	agttgatgaa	gtgtggagag	240
aattattcaa	agagacggag	gatgtgaaag	aagggagtag	agaaggaggt	gacataaatt	300

tgccacagag gcaacggact ttgggagaga tgacattgga ggagttcct 349

<210> 1305

<211> 354

<212> DNA

<213> Eucalyptus grandis

<400> 1305

cgctgacgag	gcggcgctct	gcgggggctg	cgaccaccgt	gtccaccacg	ccaacaagct	60
cgctccaag	caccaacggg	tttcccttct	ctgtccttcc	cctaaggaat	tccctctctg	120
tgacgtctgc	caggagaggc	gagcggttct	gttctgtcaa	caggaccgag	ccattctctg	180
cagggagtgc	gatctcccga	tacacacggc	caacgagcat	acccagaagc	acagcagggt	240
cttgctcacg	gggggtgaagc	tctccaccac	gtcgggaagtc	tacacgtctg	ccgccagcag	300
tgctctctctg	tccaacggat	gcgatttcgt	ccccgacttc	aaagtccgaa	gcat	354

<210> 1306

<211> 513

<212> DNA

<213> Eucalyptus grandis

<400> 1306

caaagacttg	ctttcctaca	tgcacattct	gtatgagatc	tgccctact	tgaagtttgg	60
gtacatggcg	gcgaatggag	ccattgccga	agcatgcaaa	aatgaggatc	ggatacacat	120
catagacttc	caaattgctc	agggcaccca	gtggaccact	ctccttcaag	cgcttgctgc	180
aagacctagc	gggccccctt	atgtgcggt	tacagggatt	gatgacccgg	tcaacaggta	240
cgctcgtggg	gccggattgg	aagcagttgc	aggaagggtg	gcggtgatct	ctgagaaatt	300
taagatcccc	gtggagttca	acggtttgcc	ggagtttgcc	ccaaatgtta	ctcgtgacat	360
gcttgatgtc	aggccggggg	aagctctcgc	agtgaacttc	ccactccagc	tacaccacac	420
gccagacgag	agtgttgaca	tcaccaatcc	aagggatggg	ctactaagga	tggtgaaatc	480
gctttctccg	aaagtgatca	cattgatcga	gca			513

<210> 1307

<211> 348

<212> DNA

<213> Eucalyptus grandis

<400> 1307

agcagctccg	cgctcgtgccg	gggcagcagc	agagcccgcg	gagcgtcgag	tcgctgtcct	60
cgctcccgcg	ggcgtcgccg	atgtcgcttt	cgctgtcccg	gtcgccgttc	cgggcggacc	120
cgatgggcga	gatggtcgcc	tccctcagga	acctgcagct	cgacaaagtg	aagtccatgc	180
cttgcggcgg	gtccacttcc	gggtcgccga	gggcctccag	gatccgaccg	gggttctaca	240
gcatgcccac	gacgccgaca	caatccaccc	cgacggcgcg	cgggctgggg	tgctggatt	300
cctgggagag	cccttacgag	gaagaaccgg	cgatggagaa	ggtggaat		348

<210> 1308

<211> 345

<212> DNA

<213> Eucalyptus grandis

<400> 1308

ggaaaagaga	aggcagcttt	cccgtataaa	acccaaaccc	ctccaaattc	tcccccaat	60
tctccagcca	gggaagggcg	agggcggcga	cggcgacggc	gacgatcatc	ccatctccga	120
ccagctgac	cttcgcgtcc	atcgctgtca	tgtacggacg	ggcggcggag	tgagccgct	180
acgaggacaa	ggtcttcgag	cacgcgctgg	tggcgggtgg	ggaggactcg	cccgaccggt	240
ggcagctgat	cgggaaccgc	ctgaaccggt	ccgcgtcgca	agtgttcgag	cactacaaa	300
ggctggtgga	ggacattgac	gcgatcgagt	cgggcggggt	cgagc		345

<210> 1309

<211> 337

<212> DNA

<213> Eucalyptus grandis

<400> 1309
 cattagagct gacccctgaa agtggttaagc atggggtcaca atctgggtcaa gaaggcagca 60
 ctccctctat cagttatgaa aagagttcag aggatggata taattggcga aaatatggcc 120
 agaaaaatgt taaaggaaat gaattttgtgc gtagctatta cagatgcacg catccaaact 180
 gccctgtgaa gaaacaagtg gagcgctcgc gtagaggccg gattaccgat aacatctact 240
 taggcgagca taatcatgct agcccacaga agcacctacc agtgggtgtc agctttgctg 300
 tgtctatagt tgaggagaaa ccagagaagc cttcccc 337

<210> 1310
 <211> 383
 <212> DNA
 <213> Eucalyptus grandis

<400> 1310
 gcccccttta ctttggtctc tctctccccc tctctctctc gccatcgaaa tcgaagagcc 60
 gcctctctct ctctctctct ctcttttcca agaagatcga gaatttggtc acccttcagc 120
 atctgactta agtttagtct gaaggagggg ttgctgtgatt cccatgtgat gaagtgggaa 180
 acgggagttc ccttaccacc atgtgcacg agtgcgaatt ggtttttcaa cgaggagggg 240
 aggaccgcga aatggacccc tgccgagaac aaaatgttcg aaaaagcgct ggcggtgcac 300
 gatcaggaca cgccggatcg gtgggatagg gtcgcctcga tgatccctgg gaagacgggtg 360
 gaggatgtgg ttaagcacta tca 383

<210> 1311
 <211> 455
 <212> DNA
 <213> Eucalyptus grandis

<400> 1311
 gttcatcggc ggctacgggtg cttccacatc tacccttctc ctttctctcc cctcctcttc 60
 ttctgtctct ctctctctct tegagcccggt gtcgttctcg gatggctgct cgacaagccc 120
 cgaccctctg ggcttcgagc taccgggtcc gatcgggctc aaccacctca ccccatctca 180
 gatcaaccag atccaagccc agatccagtt ccaaagcacg aacttgccct cctaccatgg 240
 ccacgggtac caccgagca tgcttctggg accgaagccc gtgtccatga agatttccgg 300
 gtcggcgggc aaaccggcga cgaagctgta ccgggggtgtg aggcagaggc attgggggcaa 360
 gtgggtcgcc cgagatccgg ctgcccaga acaggaccgg cctctgggtc ggcaccttcg 420
 acacggctga ggaagccgcc ctgcctacg accgg 455

<210> 1312
 <211> 472
 <212> DNA
 <213> Eucalyptus grandis

<400> 1312
 tgcaaaccct agactccgca tcttcgggag gaacgtctcg ctctgcgaa acctcgtacc 60
 gcgcttcggc ctgccttgct cgataatggc agattctcct cgcaagaagt attcaagatc 120
 cccctcacct tggagagagt aatcaaggct taggtcgaga tccagggtcta ggtccccaac 180
 ctggtacaag caccggccaa ggtcacggct cagaagccat ggcagatcaa gatccagaag 240
 tcatggcaga tcagtggatg agaacaatcc tggaaacgca ctttacgtga ccggtttatc 300
 cactagggtc actgaaaggg acctagaaga ccacttttca aaagagggga aggttgcttc 360
 gtgctttctc gtggtggagc ctgcacacg catctcccgt ggttttgcac ttattaccat 420
 ggagactgtt gaggatgcta accgctgtgt caagtatctg aatcaagtct gt 472

<210> 1313
 <211> 384
 <212> DNA
 <213> Eucalyptus grandis

<400> 1313
 gcacagtcta acctgattac ctacaaagga cctaccatga ttgcttgatc actgcaagca 60
 atcgccatat tgtaaagga gagcttgag tgggattggt ttatcaatct cagtgtctca 120

gattatcctc	tggtaacgca	ggatgatctg	ctttacgtgt	tctccaacgt	atctagaagt	180
cttaatttca	ttgaacatga	tcagatttct	ggatggaaat	tgaaacacag	atctaaatca	240
atcatcatcg	atccaggatt	gtacctgtca	aagaagtatg	aagtaacctg	gagcactcaa	300
cgtcgatcag	ttccaacatc	tttcaagttg	tttactggat	cagcatgggt	aatggtaact	360
cgctcttttc	tcgagtattg	tata				384

<210> 1314

<211> 428

<212> DNA

<213> Eucalyptus grandis

<400> 1314

ccgcggcgac	gacctcctcc	ggcgtctccg	ggaagggtcca	cgagtgtctg	atctgccaca	60
agagcttccc	caccggccag	gcgctcggcg	ggcacaagcg	gtgccactac	gaggcccccg	120
cccccatccc	cgctccttc	tccgccccct	ccgcgcgcgc	cgccccggcc	gccagcgggg	180
tgagcgtgtc	ggagggcggtg	gggtccacgc	acacgcagag	ccaggggcac	cgcgagttcg	240
atctgaacat	cccggcgctc	ccggagttct	cccccaggtt	cgtcgtctcc	ggcgggggtcg	300
acgacnaggt	ggagagcccc	cacctctcca	agaagccccg	gttcctggcg	ccggcgggtga	360
agacggaagc	ggcctgaact	gggtcggatc	gaaaacgcac	agaagccaaa	ccaaaactct	420
gcgagact						428

<210> 1315

<211> 140

<212> DNA

<213> Eucalyptus grandis

<400> 1315

ccaaggccgc	ggcgggtgcac	gagggcgagg	gagcgaggag	cgagctgaag	ttcatagggg	60
tgcggaagag	gaagtggggc	aggtgggtct	ccgagatccg	cctgccccaac	agccggggaga	120
ggatctggct	cggtttctac					140

<210> 1316

<211> 502

<212> DNA

<213> Eucalyptus grandis

<400> 1316

gtaaaaaagg	ggcagccctc	tgctctgtct	gaattgccgt	ctctcgctac	ttctctgggc	60
ttctttttct	ttgcttccct	tccttaaact	ctccctctcc	ccgtttcttg	tctggttttt	120
ctgggtgtct	tcgcttttct	ctgctgaagg	agtgagtttg	accgtcgggt	tcctttcttg	180
atcctccaat	tcgatcgctc	gctcctcggt	tcgacttttt	tcgggtttcc	tgctcggcact	240
gttcgattcg	gattcctcga	cggaaatggg	agtaacatca	acttcaagaa	cttcagcacc	300
gatccgacgc	cgacgaataa	caggcctcct	ggcaacacgc	tgtaaccgc	gcaaccgtcg	360
gtgtacacgc	tgacctttga	ggagttccag	aactctatag	gcaaggactt	tgggtccatg	420
aacatggatg	agctcataaa	gaacatttgg	tctgcagagg	agaaccaatc	tatggcatct	480
gctagtggcg	cttgtggtgg	cg				502

<210> 1317

<211> 365

<212> DNA

<213> Eucalyptus grandis

<400> 1317

cgctgacgag	gcggcgctct	gcgggggctg	cgaccaccgt	gtccaccacg	ccaacaagct	60
cgctccaag	caccaacggg	tttcccttct	ctgtccttcc	cctaaggaaat	tcctctctctg	120
tgacgtctgc	caggagaggg	gagcgttctt	gttctgtcaa	caggaccgag	ccattctctg	180
caggaggtgc	gatctcccga	tacacacggc	caacgagcat	accagaagc	acagcaggtt	240
cttgctcacg	ggggtgaagc	tctccaccac	gtcggaaagtc	tacacgtctg	ccgccagcag	300
tgctctctg	tccaacggat	gcgatttctg	ccccgacttc	aagtcgagg	catcgctctc	360
gttca						365

<210> 1318
 <211> 372
 <212> DNA
 <213> Eucalyptus grandis

<400> 1318
 gtacgataag tattccctct cagtcacccc cgccgacgat cctcctgccg accgcctcct 60
 cccccggccg ttccgatcct cccggcgacg cgacgacaat ggtgaagccg agcggcgggcg 120
 gcggcgatcg gggccccccg ctggcgccgt tcctcagcaa gtgctacgag atgggtggagg 180
 acgaggcgac cgacccccatc atcgcggtggg ggagcgccgg cgacaccttc gtcattctggg 240
 acatcactca attcaccctc cagttgctcc ccactactt caagcactcc aactttctcca 300
 gcttcatgcg ccagctcaac atctacgggt tcagaaaagt tgattcagat cgttgggaat 360
 tcgcaaatga tg 372

<210> 1319
 <211> 363
 <212> DNA
 <213> Eucalyptus grandis

<400> 1319
 accctgtata atctcaatcc ttggatttag agaagatttg tccaggacaa gaggagccac 60
 agatgaagca atccatgcac tgccgaccta caagttaaag ttaaagaaga acagaaatag 120
 cagtataca gaaaactcag cttctgggga aggagtaata gctgctggaa cagaaagggg 180
 gcgtgtgatt tctgggggatg atgctgtctg ttgcataatgc ttagcaaaat atgcaaaaca 240
 tgacgagctg agggagcttc catgcaacca tttctccac aaggagtgcg tggataagtg 300
 gctgaaaatc aatgcattgt gtccctctatg caagagttag gtcgggataa tcacgctggt 360
 atc 363

<210> 1320
 <211> 401
 <212> DNA
 <213> Eucalyptus grandis

<400> 1320
 atggaatgct atgggttatga ggattaatgt tgcacttttc gaagtctagg ttaccccaat 60
 tttgtcactt ttgctgattt ccactatatt tcaggccttg gttggcttaa ctggagattc 120
 atgggtgaat gtaagtcatt cgcactcatt gtattgtatg atatgtagca actgcttgct 180
 tgagtcacat cacttgtccc ataaaccttg tattgtagt ctgtgttttc acggccagta 240
 agattcacct tcttatgcat atctctatatt tcctgatgca tgagatctcc ctttctgtta 300
 agctctctta tttcgtcgat cagaatttga tcctttttca cacgaatacc cttcaagctc 360
 atttccaatt ggtttttccaa attctgtagt tcttttacgc t 401

<210> 1321
 <211> 364
 <212> DNA
 <213> Eucalyptus grandis

<400> 1321
 ctcgtgccgc ggagtcttat atcagggagc ttaacatgaa cctacaagct gcagagtctg 60
 ataaggagga tttgaagaag cagttggatg aactaaagaa gcgatcatcg gataaagaat 120
 gtatcccggg ggatcaagat cgcaagatgg caaaacctac ggggaagtagg tccactgggg 180
 tggcaatcga tgtgaagata atgggttggg atgcagtggg tcgagtagag agcggccgga 240
 aggatcatcc tgcagcaagg ttaatgggtg ctcttcaaga attgaacttg gagttgcaac 300
 atgctagtgt ttctgtggtg aacgagctca tgatccacaa gccacagtta agatggggag 360
 tcag 364

<210> 1322
 <211> 413
 <212> DNA
 <213> Eucalyptus grandis

<400> 1322
 tttttttttt ttttttcaaa ttcaagttgg gaattttatg acagtgtagt ggaagttcta 60
 gacattgctc ctttgatcct atggaagtag aattaaagct aatcatcaag ctaaacaatga 120
 actacaacta gtacaaaact ttacagactc gtcaaaaccc acaagtttca ccaccacgca 180
 gaagaagttg ccatagctcg attcctccac cagagataaa gagctccatc cttctcttcg 240
 attctataat tctcgttata ttcccttaat agatttctga cagcatcagt aactgcagaa 300
 ctcaatggga actggttgaaa cccggccatc ctaaaccttg acctccattt ccccaaaagt 360
 tcatgccttt caaccctttc cgtctctca caagctatca tgggtggctat gtc 413

<210> 1323

<211> 382

<212> DNA

<213> Eucalyptus grandis

<400> 1323
 caacaggatc ctttgtgtac tttctttgta tccacagaaa gatggatgag agcaataaca 60
 accctggggt ggctgataat gccctgggcg acgacgggca gttcaaggag caagaccggc 120
 tgcttccgat agcgaatgtt gggcggatca tgaagcagaa cttgccgccg aatgccaaaga 180
 tctccaagga ggccaaggag acgatgcagg agtgctgtgc ggagttcatc agcttcgtca 240
 caagcgaggc gtccgataag tgccggaagg agaggaggaa gactgtgaat ggagacgaca 300
 tctgctgggc gatgcaagcc ctaggcttcg acgactatgc gagtgccttg aggaggtacc 360
 tgcatagata tagggaaata ga 382

<210> 1324

<211> 377

<212> DNA

<213> Eucalyptus grandis

<400> 1324
 gcttacaggg cctgcttggg gggtaatttc tttttcagct gatatcggtg tccttacggt 60
 tatcctcttc tctccaactc ctctggttct ctggtccgcc aaagaaatgg ggagacattc 120
 ttgctgtgtg aagcagaagc tgagaaaagg gctatggtcg cccgaggaag acgagaagct 180
 cttcaactac atcacccgat tcggcgctcg ctgctggagc tctgtaccga agctcgccgg 240
 taagacatga tgacagacgg gaaaggagaa gctcattcac agttgttttc tggggaataa 300
 gtttctgttc ttggagagaa tttgattcga aaaccatgtg aatgatcgaa ttctctcgtc 360
 gaatgcacga ctccaga 377

<210> 1325

<211> 305

<212> DNA

<213> Eucalyptus grandis

<400> 1325
 tgattccgag ccgagccgcc gcggcgctcg acgacgttcc ggaagtcgcc ggatcggcac 60
 cgaaggggca cgtacaacag cagcagcagc cgcaacaggt cggcgccggc gagcccaagt 120
 acaggggctg gcggaggcgg cgggtggggca agtacaccgc cgagatcagc gaccccgta 180
 agaaggcccg cgtctggctc ggcaccttcg cctccgccga ggaggccgcc cgcgcctacg 240
 acctcgccgc cgtccgggtc cgcggtccca aggccaagac caacttcccc gcctccctct 300
 acgac 305

<210> 1326

<211> 288

<212> DNA

<213> Eucalyptus grandis

<400> 1326
 gtgctttgga gtcagcttcc tcctctgctt ccgaatattg acttctcgag aatacagctg 60
 acttctcata ttcagagtcg gatcgctcga gctcggcgcg ttcgataggg aattggctgg 120
 cttcagggtc ctggggctcg tgctttggat gttaagctcg tagagactga atcgacgatg 180
 gatggttcg aaggaaaatc gaatgctccg gctcggttcc tggtaagac ctatgagatg 240
 gtcgatgatc ctcagacgga cttcctggtg tcctggagcg agagcgga 288

<210> 1327
 <211> 190
 <212> DNA
 <213> Eucalyptus grandis

<400> 1327
 gagagagatg gggctccgga ggatgacggg tcagtcgtcg tcccggtcgg gcgacccggg 60
 cgcctccacc agcggcgggc gcggggcgga gtcgcgcggc cggttcgcgc cggcgggtca 120
 gccggagata atgagggccg ccgagaagga cgaccagtae gcctccttcc tctacgacgc 180
 ctgccgcgac 190

<210> 1328
 <211> 259
 <212> DNA
 <213> Eucalyptus grandis

<400> 1328
 gtgggtttcgg ctgcgcgggc ccgttcgagg aggagcttcc gcggcggggt ggtggccatg 60
 gccgcgcccc ggtcgggtccg gaagtcggag gaggagtggc aggcgggtcct gtcgcgggag 120
 cagttccgta tcctgaggca gaaggggacc gaatatccag gcacgggtga atacacaagt 180
 tttctgaaga ggggggtgtac aattgtgcag gatgtgggac tcctctttac cgggtctacaa 240
 ctaaattttaa ctccgctgc 259

<210> 1329
 <211> 381
 <212> DNA
 <213> Eucalyptus grandis

<400> 1329
 gacagggggtt tctgtgttggt attgtgtgtg gagatttgga gggacgagtc atggcggatc 60
 aggctttgga ggggaagccaa ccggttgatc tgtccaagca tccttcagga atcgttccca 120
 ctcttcagaa catagtctca acagtgaatt tggactgcaa attggatctt aaggccattg 180
 ctttgcaagc tagaaatgct gagtataatc ccaagcgttt tgctgctgta attatgagaa 240
 taagggagacc aaagacaacg gcattgatat ttgcttcagg gaaaatgggt tgtactggag 300
 ccaagagtga acaacaatca aagttagcag cgcggaagta tgctcgaatc attcagaaac 360
 ttggattccc ggctaaattt a 381

<210> 1330
 <211> 347
 <212> DNA
 <213> Eucalyptus grandis

<400> 1330
 ccgctctcct ccgccttccg ccaccgcaaa tccctccgat cgatcggcac gacacgaccc 60
 gaaaacgacc ccggaaagcc tccgctcccc gcggcggaag atggcgggca gcgacgcgaa 120
 gatcgggagg aggttagagg gcaaggctgc catcgtcacc gcctccacgc agggcatcgg 180
 cctcgccatc gccgagcgcc tcggcctcga aggcgcgcgc gtcgtcatct cctctcgcaa 240
 gcagaaaaat gtggatgagg ctgctgaaaa gctcagggca aagggtatag aggttttggg 300
 cttgggtttgc catgtttcca atgcacagca gaaggaaatc ccttggt 347

<210> 1331
 <211> 337
 <212> DNA
 <213> Eucalyptus grandis

<400> 1331
 gataagtcca aggggaaggc caagatcagc gcctcctccg cggccgagca ggagcaccgg 60
 aagcgcgtgc tccgcgagct caactccctc atcgccgggc cctcctccgc cgcgcgcgcc 120
 gcccccgacg acgcgcgtcg cgaggaggtc accgacaccc agtggttctt cctcgtctcc 180
 atgacgcagt ccttcggcaa cgacggcagc ttgcccggcc aggccttgta cgggtcgacc 240

ccgcttttggg tgtcggggcgg ggaccgcctc gccgactgcg gctgcgagag ggccaagcag 300
gcgcggattt tcgggctcaa caccatgggtc tgcgtcc 337

<210> 1332
<211> 325
<212> DNA
<213> Eucalyptus grandis

<400> 1332
gccaatggga gggaggagcc tctgaaccac gtcgaggcgg agaggcagag gagggagaag 60
cttaatcaga ggtttttacgc cctcagggcc gtggttccaa atgtatcaaa gatggataag 120
gcttcactgc tccaagatgc ggagtcttat atcagggagc ttaacatgaa cctacaagct 180
gcagagtctg ataaggagga tttgaagaan cagttggatg aactaaagaa gcgatcatcg 240
gataaagaat gtatcccggg ggatcaagat cgcaagatgg caaaacctac ggggaagtagg 300
tccactgggg tggcaatcga tgtga 325

<210> 1333
<211> 362
<212> DNA
<213> Eucalyptus grandis

<400> 1333
cagcatcatt ataatgtcca tgaagagaat cgactgcggc atcacgattt acattagttt 60
cgctccctt ttcgcttgct gcacctgtgc aagcctttga ctctgtagag tcatgtgcgt 120
tccttgggca cccttctttg tagctggtgg agcagggggg gctacaacgg atgcttgggg 180
gagtgatatg cgcgtctcat cagatgagaa accgggaata cgaatgttgt ggttgcgctt 240
aagggtgtagt tgcaggctgc gcacttccaa agtgtcccca ccgcgatgct tagccaagcg 300
acacgcaaag ttggtgacgg aatcgatgaa ttcacagca atagaaagca ggagatcttc 360
ca 362

<210> 1334
<211> 216
<212> DNA
<213> Eucalyptus grandis

<400> 1334
gtttacgcgg ttgttgatgg attacttaaa tgaatttgct tatgatgcac gggttgctgg 60
cctttattac agtgtgcatg acaccaacac aggttttcag gtcactgtgg ttggttatag 120
tcacaagcta aggatattgc tggaaaaagt catcgagaaa attgcaacct ttgaagttag 180
acctgagaga tttgttgtga tcaaggaagt ggtgac 216

<210> 1335
<211> 326
<212> DNA
<213> Eucalyptus grandis

<400> 1335
gcngaatacag agcaactggg aggcggataa gatgctcgac gtttacatgt atgactactt 60
gatgaagaag aagctgcaca acacggcgaa gtcattcatg actgaaggga aggtgtcgcc 120
ggatcccgtt gcaattgatg ctccctggggg atttcttttt gagtgggtgg cagtcttttg 180
ggatatattt attgcaagga ctaacgagaa acattctgaa gctgctgcag catatattga 240
ggcacaacaa ggtaaagcaa gagagcagca gcagcagcag cagcagcagc agcagcaaca 300
gcaactgcag atgcaacaat tgcac 326

<210> 1336
<211> 382
<212> DNA
<213> Eucalyptus grandis

<400> 1336
aaacaatcga taatccttcc ttccatcttt cctcctctc ccccccttga aatcccgaat 60

ccaccaccac	aacccccccac	cgccacctgc	tcgttggttaa	tctctctttt	gcttctggag	120
aggggaagtga	agtgatctcg	gatcagctga	ctttggagaa	tgatcctaaa	gctgggtat	180
ctacattgag	atcatcttta	agagcgctgt	ggttctctga	tgcatctca	tccatcaaat	240
cattcgtgtg	ggcgccctca	tcaaggtgcg	tttgctgatg	ctttatacaa	agagctgtgg	300
catgcctgtg	ctgggcctct	tgtcaccctt	cctcgagagg	gagagcgtgt	ctattat	360
ccacaaggtc	acatggagca	gc				382

<210> 1337

<211> 322

<212> DNA

<213> Eucalyptus grandis

<400> 1337

ctctctctct	ctaggtcgct	ctcgattctc	gctggctctcg	ccttcctcgg	actatcttcg	60
cgatcgcttt	tggaggatcg	ttcggggaaa	ttggaccgaa	gtttcgattt	ttagcaggcg	120
agatcagctg	aatcgggaga	tcagaataat	ggagtctcac	gatgagacag	gatgccaggc	180
cccaaaaggc	ccaatcctct	gcattaacaa	ctgtggcttc	ttcggaagtg	ctgccaccgc	240
caatatgtgc	tcaaagtgcc	acaaggacgt	gatattgaaa	caagaacagg	cacaagcagc	300
tgctcctcgc	attgagagca	tt				322

<210> 1338

<211> 536

<212> DNA

<213> Eucalyptus grandis

<400> 1338

gttcgacgag	ttcacagcga	gctgacaaat	cattgatcat	ggagcatgag	tttagttcgg	60
ctaaaatcaa	agctcttctt	gagattctac	agtcgcaatg	cagaggagaa	agtgc aaatg	120
cagagcttca	tggccccatg	ggctgtgacg	atgagtctct	ttttgaaaat	acaggcaccg	180
gggattctac	atacagagtt	aaagctgtta	agcacacaac	tgtttattca	agttctcctc	240
ctgaaggacc	aattaaagca	attgtctttt	ctcagtggac	gagtatgtta	aacttggttg	300
aacaaaatct	gatccatttt	ggcataaaatt	atagacggct	tgatggaaca	atgacccttt	360
ctgcaagaga	caaagctgtg	aaagatttta	acaccgatcc	tgagatagtc	gttatgctaa	420
tgtcattaaa	agcaggaaac	cttgggtctaa	acatggttgc	tgcttgatcat	gttattcttt	480
tggatctttg	gtggaatcca	accactgaag	atcaagctat	cgatcgagct	cataga	536

<210> 1339

<211> 438

<212> DNA

<213> Eucalyptus grandis

<400> 1339

cgacttcaag	gagtaccgac	ttcgctgcga	gctgcgcggc	cacgaggacg	atgtccgggg	60
cgtatgcgtg	tgcgggggacg	gcagcatcgg	gacctcgtcg	cgggatcgga	cggtgaggct	120
gtgggctccg	agcgccggcg	agagggcgaa	gtacgaggtg	gcgaggggtg	tgtaggggca	180
caagagcttc	gtgggtcccc	tggcgtgggt	tccgcccagc	gaggagcttc	cggagggcgg	240
gatcgtgtcc	ggcgggatgg	acactctcgt	gatggcttgg	gatttgagga	atggagaggc	300
gcagacgttg	aaggggccatc	agttgcaggt	caccggcatc	gtgttggaag	gcggcgacat	360
ttgtttctgc	ctcttggtga	ttgtacctta	ataagatgga	agaatggcca	gcttacggag	420
cactggggagg	ctcattaa					438

<210> 1340

<211> 533

<212> DNA

<213> Eucalyptus grandis

<400> 1340

ctttggaggc	cctcagctcc	cccaccgctc	cctccgcccc	gttccaattc	atgaaggact	60
cctccccgcg	cgccgcgcgc	gcccctcctc	cctcctcctc	cgctacgac	ctccccctcg	120
ccgagccctg	ggccaagcgc	aagcgtctca	agcgccecca	caaccgcgcc	tccgaggacg	180
agtacctcgc	cctctgcctc	atcatgctcg	cccgcggcgg	cgccggccgg	accctcccc	240

cgcgcgctcc	ccccgcgggc	tcttcgaggg	cggccaagggt	ggcctacagg	tgccccgtct	300
gcgacaaggg	cttccccctcc	taccaggccc	tgggcggcca	caaggccagc	caccgcaagc	360
acgcctctct	cgcctcggcc	gccgcggggg	gtgacgacca	gccgaccacc	tcgagcacct	420
ccgcggcgac	gacctcctcc	ggcgtctccg	ggaagggtcca	cgagtgtctg	atctgccaca	480
agagcttccc	accggccagg	cgctcggcgg	gcacaagcgg	tgccactacg	agg	533

<210> 1341
 <211> 363
 <212> DNA
 <213> Eucalyptus grandis

<400> 1341						
gaagcatttg	ggaagtggac	atggaaggaa	agatcccagc	tttggtactg	tttctctgca	60
tcttctcggc	tgccgtcgcg	gccgagtacg	tgccgccccca	gcctcgcgag	accctcgatt	120
tcccggtgga	ccgcaagccc	tcctcttata	cccagcaggt	tcacatttct	ttagctggag	180
atggacatat	gcgcatttca	tgggtcactg	atggtaaata	ttccccctca	tacgtggaat	240
acggaacata	gcccggctga	tatgactcta	cagctcaagg	agagagcact	tcttatagtt	300
atctatttta	tagctctgga	aagatacacc	acacggtgat	cggggccattg	gagagcaaca	360
ctg						363

<210> 1342
 <211> 316
 <212> DNA
 <213> Eucalyptus grandis

<400> 1342						
cctggcctct	gccttagctc	tcctcctcgt	cctcgccctt	atcaagctat	tcagacccaa	60
aaccaaccac	ctgaacctcc	cgcgggggag	atttggtatg	ccaatcattg	gcgagagcct	120
ggagtctctc	cgttcccagc	ttgaagggag	cccggagaag	ttcatcaagg	accggatgac	180
caagtacaac	tcccctgtgt	tcaagacctc	ggtgctcggg	gagccgatgg	tcctcctgtg	240
tgggcccggc	gggaacaagt	tcctgttctc	aaacgagggc	aagaagggtg	tgctgtggtg	300
gccgagctcg	gtccat					316

<210> 1343
 <211> 322
 <212> DNA
 <213> Eucalyptus grandis

<400> 1343						
aggtgttccg	atcttcatag	aagatgatga	tggtgagctg	ttgtggcctg	gcagcttccg	60
tcaggcggca	caagcacacg	ctcctcaacc	gagttttgtt	ctaactggag	gttctaacat	120
aagcttcgtc	ggggtgaatc	caccatctga	tgcaggcaat	tcagctcctg	acttgacact	180
gaaactttaa	aagaggttaa	tcttcagtta	agtctcatgt	ttgcttaacc	caacattgca	240
cttctgcttt	cttttggtat	attcccaaat	gttctttcca	gttcctttcc	tgtaagtgtc	300
cactccagta	tgaagtctat	aa				322

<210> 1344
 <211> 323
 <212> DNA
 <213> Eucalyptus grandis

<400> 1344						
ctggaccggc	acctgaagac	cctgaccggc	cacgtcgccg	ccgtctcctg	cgtcaagttc	60
tccaacgacg	gcacctcctc	ggcctccgcc	tccctcgaca	aaacctaat	catctgggtc	120
tccaacgccc	tctcctcctc	ccaccgcctc	gtcggccact	ccgagggcgt	ctccgacctc	180
gcctggctct	ccgactccca	ctacatctgc	tccgcctccg	acgaccggac	cctccgcata	240
tggtcctccc	gctccccctt	cgactgcctc	aagacctgcg	gcggccacac	cgacttcgtc	300
ttctgcgtca	acttcaaccc	gca				323

<210> 1345
 <211> 235

<212> DNA

<213> Eucalyptus grandis

<400> 1345

cctccgcccc	gttccaattc	atgaaggact	gggtaccccc	ccgccgacgc	cgccgcctcc	60
tcctcctact	acgaatacaa	cctccccctc	gccgagccct	gggccaagcg	caagcgctcc	120
aagcgccccc	acaacccgcc	ctccgaggac	gagtacctcg	ccctctgcct	catcatgctc	180
gcccgcggcg	gcgcggcgcc	gaccctcccc	ccgccgcctc	cccccgcggt	ctctt	235

<210> 1346

<211> 350

<212> DNA

<213> Eucalyptus grandis

<400> 1346

gtttggagga	agttcaagct	atgggaagga	tgctcaaagc	ccgcaggaca	tgcatgattc	60
acggccgaca	aaacgaccac	gtaatgttgg	ggagccttat	cgtgaccag	gacaggctga	120
gccgatggag	gaacatggaa	tgggacagc	aagtgatcct	atggtgcggg	caggcagatc	180
ggacggagggt	cataatccaa	ttatgtcggc	caccgctccc	gcaaattgtgt	ctacggctgg	240
gagaggtcgg	gtagatgata	aaaacaatcg	caaattgtcg	tgtaaagagt	gtcgtaggct	300
aaaactcaag	tgcgaccgcg	ttttcccttg	ccagtcatgc	gtcaagagag		350

<210> 1347

<211> 197

<212> DNA

<213> Eucalyptus grandis

<400> 1347

cggactcgga	ctggccgagt	caacccacgc	cccccgcgag	tcccgacccc	ccggcgccat	60
gacgcggcga	tgctcccact	gctgcaacaa	gggccacaac	tccaggacct	gccccgtccg	120
cggcggcgcc	ggggacggcg	ggggcgcgcc	ggccgcccc	tcctcctcct	ccccctccac	180
ctcctcctct	ggcgccg					197

<210> 1348

<211> 315

<212> DNA

<213> Eucalyptus grandis

<400> 1348

cgctggtctc	gcttcctcgg	actatcttcg	cgatcgcttt	tggaggatcg	ttcggggaaa	60
ttggaccgaa	gtttcgattt	ttagcaggcg	agatcagctg	aatcggtgt	ccttttgtag	120
gtgatcagaa	taatggagtc	tcacgatgag	acaggatgcc	aggccccaaa	aggcccaatc	180
ctctgcatta	acaactgtgg	cttcttcgga	agtgtcgcca	ccgccaatat	gtgctcaaag	240
tgccacaagg	acgtgatatt	gaaacaagaa	caggcacaag	cagctgcctc	ctcgattgag	300
agcattgtca	acaga					315

<210> 1349

<211> 329

<212> DNA

<213> Eucalyptus grandis

<400> 1349

gagagagatg	gggctccgga	ggatgagggt	cagtcgtcgt	cccggtcggg	cgaccggggc	60
gcctccacca	gcggcgccgg	cggggcggag	tcgccgcggc	ggttcgcgcc	ggcggctcag	120
ccggagataa	tgagggccgc	cgagaaggac	gaccagtagc	cctccttcct	ctacgacgcc	180
tgccgcgacg	ccatccgcca	cctcttcggc	accagagtcg	ccgtggcgta	tcaaagcgag	240
acgcagcttc	tcggggcaat	gctgtactat	gtgctgacga	ctgggttcggg	gcagcagacg	300
ttgggggaag	agtactgcga	catcactca				329

<210> 1350

<211> 313

<212> DNA

<213> Eucalyptus grandis

<400> 1350

tctaggtcgc	tctcgattct	cgtgggtctcg	ccttcctcgg	actatcttcg	cgatcgcttt	60
tggaggatcg	ttcggggaaa	ttggaccgaa	gtttcgattt	ttagcaggcg	agatcagctg	120
aatcggaata	atggagtctc	acgatgagac	aggatgccag	gccccaaaag	gccaatcct	180
ctgcattaac	aactgtggct	tcttcggaag	tgctgccact	gccaatatgt	gctcaaagtg	240
ccacaaggac	atgatattga	aacaagaaca	ggcacaagca	gctgcctcct	cgattgagag	300
cattgtcaac	aga					313

<210> 1351

<211> 305

<212> DNA

<213> Eucalyptus grandis

<400> 1351

ccccgcccac	ttatctgcta	tctcgcctac	ttcgctctat	tagtacctcc	acaatcccat	60
gcgcaaacgc	caacgcaccc	tcgacatgca	cgccggcgca	ccaggtocca	acgatgccat	120
tgacgcgaac	agcgtcggcg	acaacgcgtt	catcgcggat	cacgacgcaa	ttgactcggc	180
cggcgacgac	gacnacnacn	aagacaagcc	caagaccggc	cagaagcaag	gccgcccga	240
aataaagatc	gagttttatac	aggacaaatc	gagacgccat	atcaccttct	ccaaaaggaa	300
agctg						305

<210> 1352

<211> 517

<212> DNA

<213> Eucalyptus grandis

<400> 1352

gtccctccct	aggggttctt	cctcgtcgac	cgcccttctt	ccgagcccta	gcctcgcgcg	60
gcaaaggccc	ctccctccgt	ccctccctcc	gccgccatga	tgcagcagcc	ggcccccgga	120
gccgtccccg	accagcagca	gcagtaccag	cagcagcagc	agcagcagtg	gatgatgatg	180
cagcaggccg	cccagcccgt	gcccccgccg	gtgggctgga	ccccgcagcc	ggcccccgccg	240
cccatggcgg	cccagtcgat	ggccggcgcc	gcggcgcccg	agatcaagtc	gctctggatc	300
ggcgacctgc	agcctcacat	ggacgagacc	tatctcctca	actgcttngc	ccactccggg	360
gaggttctct	cagctaaggt	gattagaaat	aagcagactg	ctctgcccga	gggttacggg	420
ttcattggaat	ttatgaccgg	tgcagcagca	gagaggattt	tgcagacgta	caatggcaca	480
ttgatgccaa	attctgacca	gaatttccga	ctgaact			517

<210> 1353

<211> 472

<212> DNA

<213> Eucalyptus grandis

<400> 1353

tttttttttt	tttcagctaa	attggagcag	ctctctttta	tacttactga	actagtaatc	60
atggtgaaaag	aaacttagac	agaaagtgag	gacattacat	catactcctg	aagagcatca	120
aaggcccagc	taacagaaaa	aggccgatac	ggcaacatcc	aaacaaatta	aaagccaaat	180
tgtgacccca	acgtaccat	ccatatacaa	tgccataact	aaatcattca	ccttcgcgaca	240
tctactctct	ttctacttga	atggtgacgt	gacttatctt	gtactctctt	ctaattgtagt	300
ccacaacctt	gtccaggacc	atatcgccat	tggcgtcacg	ctttattttg	acatggcagg	360
ctaatagtac	ctttccaacc	gttatagccc	agatgtgcaa	ttcatggact	gcaatcactt	420
catcgatctt	gcaaagtcca	ctctcgagcc	tagtggcatc	aatctctcta	gg	472

<210> 1354

<211> 472

<212> DNA

<213> Eucalyptus grandis

<400> 1354

ccatcgtcac	ctgtatccac	aaaaacacac	ccaccttacc	tctgcacccg	ccccaccgc	60
ctatcgagg	gcctgcgata	cagacgcttg	gctgccaaagc	atgaagagaa	gccctccgct	120
gtgctcgaca	aatcccaaga	tcccacagac	agcgcaaagc	catccaagaa	gccccgccat	180
cgtcacagtc	ccacccagct	cgtgcccctc	aacgaactct	ttgagaaaag	cgaacacccc	240
actcttgagg	agcgaggcca	gttggtgag	aaattaggaa	tgagagacaa	gaccgtcaat	300
gcatggtttc	agaacaagcg	tgcttctact	aagaagcgca	ataagggggg	aacctcgga	360
cctcaccag	ccacgagtc	gaacgacttg	tccgaagatg	ctctcaaac	cccttcgca	420
ctgccgtcga	tagcgaacct	gctcaacgac	gcacctcat	cggcctcgcc	gc	472

<210> 1355

<211> 503

<212> DNA

<213> Eucalyptus grandis

<400> 1355

cacgcattcca	acttcatcag	gaaggagctg	agggccatca	tcaagcagag	gaagctggac	60
ttggcagaag	gcagggcgct	ggcgactcag	gacatattgt	cgcacatgct	gttggccacg	120
gacgaagatg	ggaagcacat	gaacgagatg	gacattgctg	acaagatctt	gggcttggtg	180
atcgggggcc	acgacactgc	cagtgcgcgc	tgtaccttca	tctgcaagta	ccttgccgat	240
cttccccaa	tctacgagg	agtctacaag	gagcaaattg	agatcgccaa	gtcaaaagcc	300
ccaggagagt	tgttgaactg	ggatgacatc	cagaagatga	gatactcatg	gaatgtggcg	360
tgtgaggtgc	tgcgattggc	gcctccgctc	cagggagcat	tcagagaagc	cctcaatgac	420
ttcatcttca	atggtttctc	cattcctaaa	ggctggaaga	tctattggag	taccactcg	480
actcacagga	gccagagta	ctt				503

<210> 1356

<211> 360

<212> DNA

<213> Eucalyptus grandis

<400> 1356

atcttcttct	ccccaaaaac	cccatcggac	ccaaaaaccc	taacgaagat	gaatagggag	60
aggcttatga	agatggcggg	ttctgtccgc	actggtggaa	aggggtaccat	gagaagaaaag	120
aagaaggctg	ttcataagac	caccacgaca	gatgataaaa	ggcttcaaag	caccctgaag	180
aggattgggg	tgaatgccat	ccccgcaatt	gaagaagtca	acatttttaa	ggatgatgta	240
gttatccagt	ttttgaatcc	caaagttcaa	gcgtctattg	ctgcaaatac	ctgggtagtt	300
agtggttctc	ctcagaccaa	gaagctacag	gatatcctcc	ctggcatcat	caaccaatta	360

<210> 1357

<211> 377

<212> DNA

<213> Eucalyptus grandis

<400> 1357

aaaacaacct	ccctcagctc	ctcttcacca	ctggtttttg	agatgatctg	tgtgctcggc	60
gccgttgatt	attatgtctt	attctgactt	gctgaacctg	ctgtttgccg	tgggcgtttg	120
gtgcaccgcg	tatattgcgg	ctgccgttct	cgagtcgctc	cgggtcttcc	atactctctg	180
ttcgttttga	tttcgatagc	tgttttcgaa	ggctaagatg	ggctacgcac	agctggtcat	240
cggccctgcc	ggcagtggca	agtcgactta	ttgctcgagt	ttgtatcaac	attgtgaagc	300
tattgggcgg	acaatacaca	ttgttaacct	agatcctgca	gcaaagaact	ttgactatcc	360
tgtggccatg	gatatca					377

<210> 1358

<211> 360

<212> DNA

<213> Eucalyptus grandis

<400> 1358

ctctgacgat	ggatataact	ggagaaaata	tggacagaag	catgttaagg	gctgtgaatt	60
tccacgcagc	tattacaaat	gtacctatcc	taattgtgag	gtgaaaaagc	ttttcgaacg	120
tgctcctgat	ggacatatta	cagagattat	ctacaaaagga	actcatgatc	accctaaacc	180

acaaccaagc	cgccgcttta	ctggaggagc	gaccatgccca	atccaagaag	aaagatctga	240
taggttttca	tttatacctg	cagtggagag	cacatcgacc	gtatatggcg	agacatctta	300
taatgttgag	actgatggta	ctcctgaact	atctcctgtt	gctgagaatg	acgaaactat	360

<210> 1359

<211> 347

<212> DNA

<213> Eucalyptus grandis

<400> 1359

gttccaccac	gctcgtcccg	ctccccgatt	tctgaaatcg	cgatcgccgt	cttcaacctc	60
gggaaaaaac	ctagcggatc	ccctccgggc	gccaatcat	ctcctgatcc	ccgcccgtgc	120
ccatgcgcgc	gtcgatcccc	ccgcgcgcgc	tctcgccgtc	gatctccagc	tgatcgcgcc	180
tccgattttg	ctccccgcgc	cggcgcgatg	gtggtctgca	aatgccgcaa	ggctacgaag	240
ttatactgct	tcgtgcacaa	ggctccctgtg	tgtggagaat	gcatatgctt	tacggagcac	300
caaatatgcg	tggttcgtac	ttactcagaa	tgggttatag	atggcgca		347

<210> 1360

<211> 326

<212> DNA

<213> Eucalyptus grandis

<400> 1360

ctcctectcc	ccctccacct	cctcctctgg	cgccgcggcn	gcggcgccgg	cctcngcctc	60
cggcggcggg	gtgaagctgt	tgggggttag	gttaacggac	gggtcgatca	tgaagaanag	120
cgccagcgtg	gggtgcctgt	ccgcgcgcgc	ctaccactcc	tcgtcctccg	ccgcggcatc	180
cccgaacccc	ggctcgtccc	cgatcgacgg	gagcgacggc	tacctgtccg	acgatcccgc	240
gcccggctcc	cgctcgtcca	atcggcgcgt	cgagagggaag	aaaggatatcg	aggattttga	300
ttgacgcgcg	gctccctgat	tccctg				326

<210> 1361

<211> 526

<212> DNA

<213> Eucalyptus grandis

<400> 1361

atcccactcc	ccatccgctc	cgctgaatc	ctctcctggg	aaaattaggg	tttctgcaag	60
ctccggattt	tcgctccctt	ttgggggtcc	tcgatttgat	gataagccat	ggatgcctgg	120
ggctcgtgcta	gtgtgctgcg	cgcgctcctg	tggctcgctt	tgcttggggg	tggccgcacg	180
gcgtcggcga	gcgtcgtcct	gatcggcagc	aacgtcacc	tctccttcgc	cgccgtcgag	240
gctgaattcg	ctccgccgat	taagggttct	gggggtttgcg	gcgtgctgta	tcttgccggac	300
ccgatcgatg	cgtgctctca	attgggtgaat	gaggccaacc	ggttgccgaa	tgctagctcc	360
ccttttcgcc	taattgttag	gggaggagga	tgtagtcttcg	aagagaaagt	taggagagct	420
caaaaaggctg	gattcaaagc	ggctattgtc	tatgacaacg	aagctgatgg	caacttgggtg	480
ccaatggctg	gacattcagc	tgggataaag	atccatgctg	tgttcg		526

<210> 1362

<211> 307

<212> DNA

<213> Eucalyptus grandis

<400> 1362

gacccgcata	cccgcgtgcca	atctggagga	cctatttgac	aaccataaca	tggctcgaat	60
acgggacgta	tgggccccga	atcttgagat	agagatgcag	aacatccgcg	aggccatcga	120
gaaatactcg	tatgtttcaa	tggacaccga	gttcttgag	tgggtggcgcg	gcccataagg	180
aacttcaaaa	cgtcctcgga	ctaccactac	cagacgatgc	gctgtaacgt	cgaccttctc	240
aagatcatcc	aagtcgggat	cacgctggca	gacgaggagg	ggttgttccc	gcaggactgc	300
tctacgt						307

<210> 1363

<211> 353

<212> DNA

<213> Eucalyptus grandis

<400> 1363

cttgaagggtg	acttcaacaa	acacgatgag	gataactgga	tccaagaaga	gtttgagaac	60
catgtggnta	aacaacgtga	aggaaagagg	ccgcttttga	ctggagatct	cctagtgaag	120
ctcgaaagag	gtgttgggaa	gctgggaagt	ttcatgttta	ctgacaattc	cagctggaat	180
aggagtaaaa	gtttcaggat	agggcttaag	gtggcctcag	gttattgtgg	gaacacacga	240
atccgagaag	caaaaacata	agccttcact	gtgagggagc	atagaggaga	atcatataag	300
aaacattatc	cacctgcacc	tgacgattaa	atctggaggt	tggagaagat	cgc	353

<210> 1364

<211> 324

<212> DNA

<213> Eucalyptus grandis

<400> 1364

cctcgcccgg	caaaaccgat	tcgagggtcg	gagtcgagta	aagatgaatg	tggagaagct	60
tatgaagatg	gcgggttcag	tccgcactgg	tggaaagggt	accatgagaa	gaaagaagaa	120
ggctgtgcac	aagacaacta	ccacggatga	caaaaggctc	caaagcactc	tcaaaagaat	180
tgggggtta	gctattcctg	caattgagga	agtcaacatt	ttcaaggatg	atgttgtcat	240
ccaatttgta	aatcccaaag	ttcaagcctc	tattgcagcc	aatacatggg	ttgtcagtgg	300
tgctcctcag	accaagaaat	tgca				324

<210> 1365

<211> 306

<212> DNA

<213> Eucalyptus grandis

<400> 1365

gacaaattga	tgaacatga	atatggatgg	gtgtttaaca	ctccggttga	tgtaaagggc	60
ctcgggttgc	atgattacta	tagcatcata	aagcatccaa	tggacttggg	cagtgtgaag	120
acaaggctga	accggaactg	gtataagtca	ccgaaagaat	ttgcagagga	tgtcagactt	180
acgttccgta	atgccatgac	atataaccct	gaagggcaag	atgttcatgt	catggctgag	240
attctgtaca	agatatttga	ggatagatgg	gccattatag	agtcagatta	taatcgtgaa	300
atgcgg						306

<210> 1366

<211> 345

<212> DNA

<213> Eucalyptus grandis

<400> 1366

cggccgcctg	cagctttccc	ctccgtgtcg	acacgacgac	gactccgccc	ccgctccccc	60
ctcgcgtcgt	ctctccttct	ctcgccctgt	atatatctct	cgtcccccga	caaaaaaagg	120
agaaatctga	agagagggga	ctgaaattag	gttattgaga	aggattcttc	ccgtgaccaa	180
tcttttggag	aaagatggct	tctcaattta	atttcaaagg	cataaccgat	gcacgcaag	240
ctgaaggagt	agctgggaaa	tcacacggaa	atcactcttt	aactcggcag	ccatcaatat	300
atgctttgac	ttttgatgag	tttcaaaaca	catgggggtg	gcttg		345

<210> 1367

<211> 292

<212> DNA

<213> Eucalyptus grandis

<400> 1367

cgaaggctctc	acatttatga	aactcaaggt	ctgaaggatg	catttattat	atgtctcaat	60
gccgtagagt	ccattgatgc	aactaaaaag	gggagccttg	ctaggttcat	aaatcattca	120
tgccagccaa	attgtgagac	aaggaaatgg	aatgtattgg	gggagataag	agttggcata	180
tttgccaagc	atgacattcc	tgctggatct	gaattgtcat	atgattataa	cttcgagtgg	240
tatggtggag	ccaaggctccg	ttgtctctgt	ggtgcaccta	gctgtctggt	tt	292

<210> 1368
 <211> 278
 <212> DNA
 <213> Eucalyptus grandis

<400> 1368
 ctgcaacgac ctgacggcgt tgcggcgggt cctgccgtcg aaccaccacc aggacgagga 60
 ggacgaggag gacgggaggg cggccgggga ggacggcgtg ctgggctgcg acgagttccg 120
 gatgtacgag ttcaaggtga ggaagtgcgc gcgcgggagg tcgcacgact ggacagagtg 180
 cccgtacgcg caccgcggcg agaaggcgcg acgcagggac ccgcgccggt tcttctactc 240
 cggcactgca tgtcctgatt tccgcaaagg cgcgtgca 278

<210> 1369
 <211> 328
 <212> DNA
 <213> Eucalyptus grandis

<400> 1369
 ttcacttcgt cgcctgcctc gtcgtcctcc ctgtcctcct cgcgaatctc catcggcgag 60
 aactctgata aagcatccct cggctatctg tcggatggcc tgctgggtag atccaagag 120
 aagaagaaag gagttccatg gacagaggag gaacacagaa ccttcttggt ggggcttgag 180
 aagcttggga aggggtgatt gagaggcatc tctaggagct atgtgaccac aagaacaccg 240
 gccaggttg caagtcatgc tcagaaatat ttcctccggc aagtgcgctt caacaagaaa 300
 aagcggcgct cgagcctctt tgacatgg 328

<210> 1370
 <211> 96
 <212> DNA
 <213> Eucalyptus grandis

<400> 1370
 tgaattcggc ggggagttaa tgaatccaag aagcaactgg ctaattgtat ataattgatga 60
 tgagggngac atgatgcttg ttggggatga cccgtg 96

<210> 1371
 <211> 320
 <212> DNA
 <213> Eucalyptus grandis

<400> 1371
 agagagagaa gaacccttct tcacaaacct ctctctctct ctctctctct cttcccctgt 60
 gtctgtcgat tctcgctggt ctgcggttcc tcggattggt tcgatcgcgt acgctgaatc 120
 gcgcggggaa ttcggcggcg gtttcgattt tgtcgagcga gatcagcaga atcaggagat 180
 caggacaatg gagtctcaca atgagacagg atgccagcct ccaaaaggcc caatcctctg 240
 catcaacaac tgtggcttct ttggaagtgc tgccactgcc aatatgtgct cgaagtgcc 300
 caaggatgtg atgctgaagc 320

<210> 1372
 <211> 343
 <212> DNA
 <213> Eucalyptus grandis

<400> 1372
 cggcgcgctg cagctttccc ctccgtgtcg acacgacgac gactccgccg ccgctcccc 60
 ctgcgctcgt ctctccttct ctgcgccgtg atatatctct cgtccccga caaaaaagg 120
 agaaatctga agagagggga ctgaaattag gttattgaga aggattcttc ccgtgaccaa 180
 tcttttgag aaagatggct tctcaattta atttcaaagg cataaccgat gcatcgcaag 240
 ctgaaggagt agctgggaaa tcacacggaa atcaactctt aactcggcag ccatcaatat 300
 atgctttgac ttttgatgag tttcaaaaca catgggggtg gct 343

<210> 1373
 <211> 310
 <212> DNA
 <213> Eucalyptus grandis

<400> 1373
 ctccccctcg cgcagccctg ggccaagcgc aagcgctcca agcgccccc caaccgccc 60
 tccgaggacg agtacctcgc cctctgcctc atcatgctcg cccgcggcgg cgccggccgg 120
 accctcccc cgccgcctcc ccccgcggtc tcttcgagg cggccaagg ggcctacagg 180
 tgccccgtct gcgacaagg cttccccctc taccaggccc tgggcggcca caaggccagc 240
 caccgcaagc acgcctctc cgccgcggcc gccgcgggg gtgacgacca gccgaccacc 300
 tcgagcact 310

<210> 1374
 <211> 306
 <212> DNA
 <213> Eucalyptus grandis

<400> 1374
 agcaagcaaa agaagaaacc agaaaaatca gacaccccga tttcacattc tctactacag 60
 aattccggag atggtgaaga gagacagaga ggacacggag gtcgaagccc tggccagggc 120
 caattgcttg atgctcctct cccgtgttg cgagagcacc gactcggcgt cgccggaccg 180
 caaatcgcg cctacagagc gaatgttcgc ctgcaacact tgcaaccgcg agttctnctc 240
 gttccaggcg ctcgaggggc acaaagccag ccacaagaag cagaagctga tctccggtga 300
 cctctt 306

<210> 1375
 <211> 273
 <212> DNA
 <213> Eucalyptus grandis

<400> 1375
 cctcctctc ctgctgcggc tacgacctgc cctcgcgcga gccctgggccc aagcgcaagc 60
 gcttcaagcg cccccacaac ccgcctccg aggacgagta cctcgcctc tggctgatca 120
 tgetcgccc cgccggcgcc ggccggaccc tcccccgcc gcctcccccc gtggtctctt 180
 ccgaggcgg caatgtggc tacaggtgcc ccgactgcga caagggttc cctcctacc 240
 aggccttgg cgccacaag gccagccacc gta 273

<210> 1376
 <211> 319
 <212> DNA
 <213> Eucalyptus grandis

<400> 1376
 gacaaatgag aaccctagga cgccttcagt cgacaaggag agcactactc caaggacgtc 60
 gaaatcagaa gaggagcaga gcgacacgag caactcgcaa gagaagggtc tcaagaaacc 120
 tgacaagata cttccttgcc ctcgatgtaa tagcatggac accaaattct gttactacaa 180
 caactataat gtgaaccagc cccgacactt ctgcaagaac tgccagagat actggacagc 240
 tgggtggaacc atgaggaatg ttccctgtggg tgctggccgc cgcaagaaca agaactcggc 300
 atctcattac cgtcatcta 319

<210> 1377
 <211> 339
 <212> DNA
 <213> Eucalyptus grandis

<400> 1377
 tctctctctt cgtttctccc gtttctctct ctctacctct cgccaagaaa ccgccaggaa 60
 aggaaggaag gtaaaaagaa aagaaaagga agccatggct ccgagagaaa agcccagcgt 120
 cgccgccatc ccaaacccta acggcgctaa ggaaatccgt ttccggggcg tccggaagag 180
 gccctggggc cgctacgccg ccgagatccg ggaccccgcc aagaagacc gggtgtggct 240

cggcaccttc	gacacagccg	aggaggccgc	ccgcgcctac	gacaccgccg	cccgcgagtt	300
ccgcggcgcc	aaggccaaga	ccaacttccc	cacctccgc			339

<210> 1378
 <211> 343
 <212> DNA
 <213> Eucalyptus grandis

<400> 1378						
ctttgacgcg	cattaaattc	ccgcgactcc	gaaatatctc	acctccctct	cccgcagaat	60
ccctagattc	cttccttagc	tctctctctc	tccctctctc	tctctctctc	tctatagaaa	120
attcctcctc	tttgggtggc	gcgagaggcg	ggtgcgaggc	atttccggtc	gcgggtgtat	180
gtgcgtgggg	ttgggggttg	ggtgggggag	atgaagattc	agtgcacacg	gtgcgaggcg	240
gcggaggcga	gcgtcctctg	ctgcgccgac	gaggcgggcg	tctgctgggc	ctgcgacgag	300
aaggtgcacg	ccgccaacaa	gctcgccagc	aagcaccagc	gcg		343

<210> 1379
 <211> 368
 <212> DNA
 <213> Eucalyptus grandis

<400> 1379						
ctcgattctc	gctgggtctc	ccttctctcg	actatcttct	cgatcgcttt	tggaggatcg	60
ttcggggaaa	ttggaccgaa	gtttcgattt	ttagcaggcg	agatcagctg	aatcgggaga	120
tcagaataat	ggagtctcac	gatgagacag	gatgccaggc	cccaaaaggc	ccaatcctct	180
gcattaacaa	ctgtggcttc	ttcggaagtg	ctgccaccgc	caatatgtgc	tcaaagtgcc	240
acaaggacgt	gatattgaaa	caagaacagg	cacaagcagc	tgcctcctcg	attgagagca	300
ttgtcaacag	aagttccaac	gaaaatggta	aaggacctgt	ggcaactgaa	aattggattt	360
gcaagctg						368

<210> 1380
 <211> 362
 <212> DNA
 <213> Eucalyptus grandis

<400> 1380						
gaggctcagt	acttcgtgta	gccatggggc	atgaaagtga	agcatttgaa	gagtttgttg	60
atgcgcacaa	aacttgcttg	aatgatctca	tggtcttccc	tactcgtaat	gccttggtact	120
ctcaagtgtt	gctgcaaagt	cagaaaagct	tgctgccttg	cagaacgaat	atcattttgc	180
taaagcaagg	attgatgaag	atcatgagaa	ggcgcagcga	ctggagaaga	aggtcaaaac	240
tctcacattc	ggctatcaga	tgccggagaa	gactcttcca	gaccaaattg	agtcaacctt	300
caagcagctg	gacactgcag	ggacagaact	cgagtgtttc	ccagctctgc	agaagcaaga	360
gc						362

<210> 1381
 <211> 459
 <212> DNA
 <213> Eucalyptus grandis

<400> 1381						
tgctcgcaaa	gtttgtttct	ttgtcacaaa	gcccgaagaa	ttaaggcctg	tctatgcttc	60
gacgggatca	gctatgcctt	ccccaaaatc	ctactcatca	agtgggctgg	acatgtccac	120
attgagtcct	ctctcaatca	gttctccgtc	agcatcgctg	cctgttactt	caacagcacc	180
catgtctcct	cttgcagcct	cgatcatctcc	gatgtctgtg	aacatgtggc	agagcaaggc	240
taacaagctc	tccccgcaa	tgctgcagct	ctcaggtagt	aggctgaaga	ctgctttgag	300
tgctagggac	ttggacctgg	agatggaatt	gcgtggctca	gagagtcaga	tggccactca	360
acagcatcag	ttgatggaag	agatatctcg	tctctcctca	ccatcctcct	gcttttagtag	420
taggattggg	gaagtgaac	ccactaacct	cgatgacgt			459

<210> 1382
 <211> 319

<212> DNA

<213> Eucalyptus grandis

<400> 1382

aaaaaaagaa	gcataacttc	aacgagcgaa	tctccctctg	tctctgggtc	atctttgggt	60
cttcaggctc	agaaccatgg	ctcagactgt	tgttctcaag	gttaaaatgt	catgtcaagg	120
ctgcgctgga	gctgtcagaa	gggtcctgga	aaaaacggaa	ggtgtggaaa	catttgacat	180
cgatctgaag	gaacagaagg	tgacagtcaa	gggcaatctg	cagcccgatg	ctgtcctgca	240
aaccgtctca	aagtccggaa	aacaaactgc	tttctgggaa	gcggaagccc	cagcccaacc	300
cgaagtgaag	cccaccgaa					319

<210> 1383

<211> 408

<212> DNA

<213> Eucalyptus grandis

<400> 1383

cttgctttcc	tcttggttgt	ccaacgcaga	gagaagagag	agagagagag	gtggaagaag	60
atcaatctcg	tatctgaccg	gcgaccggtg	gtgctcttca	tcttctccac	ctcatcctct	120
ctctctagag	aaccgaaagc	cggcgtcttt	cgctcgtctc	ggttcggcat	gaacgggaag	180
gccaacgtct	ccaaggagct	caatgcgcac	cacagaaaga	ttctcgaagg	gcttctcaaa	240
ttgcctgaga	acagggagtg	tgctgattgt	aaggccaaag	gtccaagatg	ggctagtgtc	300
aatttaggga	tatttatatg	catgcaatgt	tcaggaatcc	atagaagtct	tggggtacac	360
atatcgaagg	tccgatcagc	tactttggac	acatggcttc	cagagcag		408

<210> 1384

<211> 315

<212> DNA

<213> Eucalyptus grandis

<400> 1384

gcaaaattgg	gccccttcaa	aattactggg	aggtcttctc	ctaaatgcct	agaaggatcc	60
gatggaagaa	atttgcagct	acaattcagg	accagggtgt	cgctcccgtc	ctttactgga	120
ggcaaaagtgg	aaggcgagca	aggtgctgca	atccatgtcg	tcttaatgaa	tgcagataca	180
ggctgtgctg	tcacatcagg	tccagagtcc	tctgtgaagc	ttgatgttgt	tgtccttgaa	240
ggggatttca	acaatgaaga	tgatgacact	tggactcagg	aagaatttga	cagtcatgta	300
gtgaaagaac	gtgaa					315

<210> 1385

<211> 375

<212> DNA

<213> Eucalyptus grandis

<400> 1385

gttctcgaga	accagctcc	atcccagttc	gacccatctg	agaacaagtc	aaccagatc	60
gtcaaaatcg	aatcttgact	cgaggagagaa	gcggagaatg	acgaagcgca	gcgcagccaa	120
ggccgcggcg	gtgcacgagg	gcgaggagagc	gaggagcgag	ctgaagttca	gaggggtgcg	180
gaagaggaag	tggggcaggt	gggtctccga	gatccgcctg	cccaacagcc	gggagaggat	240
ctggctcggc	tcctacgaca	cccccgagaa	ggcggcccg	gccttcgacg	ccgccgcctt	300
ctgcctcgge	cgccccgcg	cgaagctcaa	ctnccccggc	agcccccccg	agatctccgg	360
cgcggcgtcc	ctctc					375

<210> 1386

<211> 332

<212> DNA

<213> Eucalyptus grandis

<400> 1386

ccgaatacca	ccaccgcgaa	aatgatgatc	ggcgagtccc	gccaccaccc	cctccacccc	60
acgacggttt	gcateccctc	tccgctgtgg	ccgtccctcg	acgatcccg	cgacgagatc	120
tccccgcct	tcgacgcgga	ccacctcgcc	gcgctcgccg	ccgcttctag	tccgtacgct	180

ctgcaggaca	tcatcgccgc	gctgcgccgc	caccagtcgc	acccggactc	cgacggcccc	240
gactcgccgc	tggaacctta	cacgtccgat	cacttcgcga	tgtacgagtt	caagggtccgg	300
cggtgcgcgc	gcggcaagtc	ccacgactgg	ac			332

<210> 1387

<211> 320

<212> DNA

<213> Eucalyptus grandis

<400> 1387

ggaacctttt	tggttttttt	ttggcgctcg	ggcaccgggt	cgaggagtttg	gctgcaatgg	60
ctggntgagg	cacagaatga	ggttgcaagta	tcaagtgcct	tggtcaccgt	tcccaatcgt	120
ccttccaaag	ttgggtcaca	attggaagct	gtggataatc	tgaaagagtt	gcaggtcctg	180
gaaaatgacc	agacacctaa	ggtgaggaag	ccttacacca	tctccaagca	aagagagaaa	240
tggaacggacg	aagagcatga	gaggttcctt	gaagctttga	aactgtatgg	ccgcggttgg	300
cgtcagatag	aagagcatgt					320

<210> 1388

<211> 409

<212> DNA

<213> Eucalyptus grandis

<400> 1388

ttcagttagt	gctcttccac	cctctaaagc	ctcatttctt	cgtcgcaacg	cagcagtacc	60
gtccggatat	acaacctgtc	cgagcaaaaa	ttgttgaaga	cgctgacgcc	tggtatcaaa	120
tggaatatctt	ccatggatgt	tcacccgctc	ggcgatcadc	tcatcgttgg	tggttacgac	180
cgaaaactgt	gctggtttga	cctggaactc	agtgacaagc	catacaagat	tttacgatat	240
cacacacgcg	ccattcggtc	tttggcggtc	cacccaacat	atccactatt	tgcgctcctc	300
tccgacgacg	gcgctatcca	ggtgttccat	tccagagtgt	ataacgacct	gatgacggat	360
cctttgatcg	tccctctgaa	aattctccga	ggacatactg	taaaggaag		409

<210> 1389

<211> 313

<212> DNA

<213> Eucalyptus grandis

<400> 1389

cggactcgga	ctcgcccgag	tcaaccacacg	ccccccgcga	gtcccgaccc	cccggcgcca	60
tgacgcggcg	atgctccac	tgctgcaaca	agggccacaa	ctccaggacc	tgccccgtcc	120
gcggcgggcg	cgtcggcggc	ggggacggcg	ggggcgcggc	ggccgcccc	tcctcctcct	180
ccccctccac	ctcctcctct	ggcgccgcgc	cgggcgcggc	ggcctcgcc	tccggcgggc	240
gggtgaagct	gttcgggggt	aggttaacgc	acgggtcgat	catgaagaag	agcgccagcg	300
tgggggtgct	gtc					313

<210> 1390

<211> 329

<212> DNA

<213> Eucalyptus grandis

<400> 1390

cgagaatcca	gctccatccc	agttcgaccc	atccgagaac	aagtcaaccc	agatcgtaaa	60
aatcgaatct	tgactcgagg	gagaagcgga	gaatgacgaa	gcgcagcgca	gccaaggccg	120
cggcgggtgca	cgagggcgag	ggagcgagga	gcgagctgaa	gttcagaggg	gtgcggaaga	180
ggaagtgggg	caggtgggtc	tncgagatcc	gcctgcccac	cagccgggag	aggatctggc	240
tgggtcctta	cgacaccccc	gagaagggcg	cccgcgcctt	cgacgcggcc	gccttctgcc	300
tgggcgcgcc	gccgcgaagc	tcaacttcc				329

<210> 1391

<211> 156

<212> DNA

<213> Eucalyptus grandis

<400> 1391

cggacccgat	gggcgagatg	gtcgctccc	tcaggaacct	gcagctcgac	aaagtgaagt	60
ccatgccttg	cgccgggtcc	acttcgggt	cgccgagggc	ctccaggatc	cgaccggggt	120
tctacagtat	gccacgacg	ccgacacagt	ccacc			156

<210> 1392

<211> 555

<212> DNA

<213> Eucalyptus grandis

<400> 1392

gaagctcgac	acgcgatttc	cggtcgcaag	gatcaagaag	ataatgcaag	cagatgaaga	60
tgtaggga	attgcattag	cagttcctgt	tctagtctct	aaagcattag	aattattttt	120
gcaagacctt	tgtgaccgta	catacgagat	aacacttcaa	aggggagcaa	agactatgaa	180
ttcgctgcat	ttaaagcatt	gtgtgcnaag	ctataatgtg	tttgatttcc	tgaggagat	240
tgtcagcagg	gttcctgact	atggtcatgg	tcatggtcat	tcagatgctg	tctctgagga	300
tagaacagt	tccaggagaa	ggaaggccac	catcgatgat	ggtaatgaca	ctgatgagga	360
atccaagaag	agcaggatgc	ttgagatggc	ccatactggc	agcagtggca	gaggaagagg	420
ccgtggccga	ggaagaggcc	gcgggcgtgg	tggccgagcc	actgagaggg	agactgcgca	480
ccatgaaact	gaatcatctg	agccgaccac	atctctgcaa	cctgtcaaca	agaacattgt	540
caatcaagga	acagt					555

<210> 1393

<211> 525

<212> DNA

<213> Eucalyptus grandis

<400> 1393

cgcgatccc	gcgagcgtct	cccccaagt	ccccttcggc	tacgacgcgc	cgccggattc	60
cggggccatc	tcccccaagt	gccccctcgg	ctacgactcg	cagacgttca	agctcggccc	120
tctcagctgc	atgatctgtc	aggcccttct	gttcgattgc	gccaaatgcg	tgccctgttc	180
tcacgtcttc	tgcaaggcat	gtatattgcg	atttaaggac	tgccactct	gtggagctga	240
tattgagggc	acagaagccg	actcgaatct	tcagagcaca	gttgatcggt	ttatcgaagg	300
ccatggtaga	attaagagg	cccatgttga	gaatgttgat	aaagaggaag	ttagcgcgaa	360
ggagacggtg	atatatgagg	acgtgtcttt	ggaaagagg	gctttcttgg	ttcaacaagc	420
catgcgggct	tttcgtgctc	aaaatgtgga	aagtgccaa	tcaagactca	gtgtctgtgc	480
tgaggatata	agagatcaga	taacaagaac	aggcagcacg	tcaga		525

<210> 1394

<211> 443

<212> DNA

<213> Eucalyptus grandis

<400> 1394

caatgtgtgg	gggcgccatc	atctccgact	tcaccccaa	ccagagggcc	cgccgattga	60
cctcggactt	cctgtggccc	gatctgaaga	gatcgggccg	caagcagtcg	aggcggccgg	120
ccaggctcga	ggtcgtcgat	gtcgtggacg	atgacttcga	ggccgacttc	cagggcttca	180
aggacgagtc	cgacgtcgag	gacgacttcg	acgacgaggt	cgaggctcgac	gtcaagccct	240
tcgctttctc	cgccgccgag	cctcggtact	ccaaaggctc	ttcaaccacc	aaatctgttg	300
agtataatgg	gcaagctgag	aaatctgcca	agagaaagag	gaagaaccaa	tataggggaa	360
tcaggcagcg	tccatgggga	aaatgggctg	ctgagatccg	tgaccaagga	aaaggggtcc	420
gagtttggct	tgggacgttt	aac				443

<210> 1395

<211> 409

<212> DNA

<213> Eucalyptus grandis

<400> 1395

ccgaaatggc	ccagttggta	tgcggaggct	gccacacctt	actcatgtac	atccgaggag	60
------------	------------	------------	------------	------------	------------	----

cgacaagcgt	tcagtgtctc	tgttgtcaca	cagtcaacct	agccttggaa	gcaaatacagg	120
tggcacacgt	caactgcggg	aattgcagga	tgctcctgat	gtaccaatat	ggcgacagg	180
cgggtcaaatg	cgctgtttgc	aattttgtta	catcagttgg	tgcttcgtca	agcacactgg	240
aacagaagtt	caccagctag	aattagcaat	aaacctaccg	gtcacaggcc	tcacaactca	300
tggttataag	acttctattc	tactgccgct	gccgccgcca	ctgcacatca	gcgtcatgaa	360
cgcaagctga	gaaaatccct	actagtttaa	cttgtataga	gttaaaatc		409

<210> 1396

<211> 462

<212> DNA

<213> Eucalyptus grandis

<400> 1396

accattttctt	ccgaacacaa	gaggaggcgg	gtggtggtgg	tggtgttgc	gcttctggtg	60
ccgtccactt	ccttcttccc	acctccatct	tcattctctc	ctccctctct	ctctctgaat	120
ctaccgaacc	cttctcgccg	aaggnnnatn	agagagagag	agagagagag	agacgggaag	180
accatcgctt	tgcggccatcg	cgtgcacgag	cagtcatgag	gagaggcaga	tgcgcccgg	240
cggccgcgaa	gagggaggcg	gccgagatag	cggcgccgcc	ggtgccccat	gcggctgcgg	300
cggcgccggc	ggaaccacga	tacagggggc	tccggcgga	gtcgctgggc	cgatacacgg	360
ccgagatcag	agaccccggg	acgaagaagc	tcgtgcggct	cggcaacttc	ggctcgccgg	420
aggaaagcgg	cgcggtgctt	cgacgccaag	gcccgtggcg	tt		462

<210> 1397

<211> 407

<212> DNA

<213> Eucalyptus grandis

<400> 1397

ctctcgctct	gcaatttcac	aacgagtcgg	tcagtagtag	gacctcatte	acagctccag	60
aaacccgaaa	agatgagcca	atccaccatg	ttggtagcgg	aagagaccat	atcttctccg	120
ccccctttgt	ataaccagcg	aaaccatccc	cacgacggcg	cctctgggct	caaccggttc	180
ctcaccacgg	agcactgggg	cgacctccct	ctccagctca	acgactccga	tgacatgctc	240
atctacaact	ccctccacga	cgcctccac	tccggctggg	cccccttcga	ctccgtcatc	300
accgcgctcc	accccgagcc	ccagccccc	ccccctctcc	cgcgcgcttc	cgteccccc	360
tccttcgcct	ccgacgagcc	ctgtcgctcc	acaacgcttt	cgctct		407

<210> 1398

<211> 456

<212> DNA

<213> Eucalyptus grandis

<400> 1398

ccgacctcct	ctctccacgc	ggccactgtc	ccgtcgcgcg	aattcgcccc	gccgtcgtag	60
gagaccgcat	cctccgccgc	cgcgcgcatg	gccccagctt	cattccctgc	gctagcaacg	120
catttcaatg	gaagtatgct	caatgatact	aactcatctg	gtgaaagtca	cacacgtaat	180
ggaaggccac	gaggagatgc	caggggaagg	aatcaattac	ttcctcgtaa	ctggcccagg	240
ataacagatc	aagagctaca	acaaatctca	ggagactcga	actctgtaat	cactcctctg	300
tttgagaaaa	tggttgagtgc	tagtgatgca	ggtaaaattg	gacgtttagt	gctgccaaaga	360
aaatgtgccg	aggcctatct	tccgtctatt	tctcagcttg	aaggattgcc	actcaaagtt	420
caggatgcca	aaggctcggg	gtggatattt	caatta			456

<210> 1399

<211> 474

<212> DNA

<213> Eucalyptus grandis

<400> 1399

aagttgagga	agtcgagttg	gagttctcgg	agggtgaaat	ggcggcttga	ttgagggcct	60
tggtggggct	tgattggaag	gatttgatgg	agctgttcat	tccaaaggca	ttgtcttctt	120
gagatgcgga	cttcaaacca	gcagcgctct	tggttgattt	gggtggcgcc	ctgcgagtcg	180
tgccgttctc	agaccagct	tgctctcggc	tcttggtctc	ttccaagtac	atttcttcga	240

ccatgggctt	ccagaggcga	acccgagcgt	tgatgaacca	gtagacacc	tggtcctgg	300
ttagtcccgc	ttgttttgcg	agcatgtgtt	tgccgaatc	tttgggatag	ctgcaattgc	360
aacacgccag	aatgttgaat	gtacaattgc	aactcaaaca	taaagcgtgg	tcgtcaacca	420
tgaacatggt	ttaaattact	cctatgatct	acagttgatc	gaacttacct	ttgg	474

<210> 1400

<211> 443

<212> DNA

<213> Eucalyptus grandis

<400> 1400

gccccgtctt	ccncaaggcc	atcggcgagc	tccaaggcca	ctccggcatc	gcgcgggtca	60
tgctcttcta	cgcccgcagc	ctcttcggcc	tcgtcgacca	cgggaatggc	atgggcgtcg	120
cgaacgcggg	cctcgtgtac	ttcgacggcc	acctcctcgc	gatgtccgag	gacgacctcc	180
cctaccacgt	gcgcgtcacg	cgctccggcg	acctcgagac	cgtcggccgc	tacgacttcg	240
ccggccagct	cgactctccg	atgatcgccc	acccgaagat	cgaccgggct	tccggcgaga	300
tggtcgcctt	cagctacgac	gtcgtccgga	agccgtacct	caagtacttc	cgattctcca	360
aggacggcga	gaagtccccc	gacgtcgaga	tccccctggc	tgagccgacc	atgatgcacg	420
atttcgccat	caccgagcgc	ttt				443

<210> 1401

<211> 481

<212> DNA

<213> Eucalyptus grandis

<400> 1401

atgagctgag	aatagccgaa	gcatggatgt	ggagatagcg	gcgacagcgg	cgggacgctg	60
aatatactct	ccttgttccc	ttccccaacg	tcccagaacc	ccctccagct	cgacggcgctc	120
agcggacatg	tatccctgcc	gctcgccaacg	tccgcagtgt	gtctcttctt	caccacttta	180
taactgccgc	cggcactcat	ctcggactcg	gcgctctccg	cggcggcttc	ctctcttget	240
ctcttgcgag	aagcatccgc	cggggccagc	gacgggtccg	tcgacgtcgg	ctcgtcgcgg	300
ccgcctcga	gcgggaagtt	caggatggcc	ttgtcccgcc	ggagcctgaa	cgcggcgcgg	360
tcgtaggcct	tcgtgcctc	caccgccgtg	tcgaacgtcc	ccagccacac	gcgcgtcccc	420
ttgcgcgtcg	ggtcgcgtat	ctccgccgcg	aacttcccc	acggccgccg	gcgcacgccc	480
c						481

<210> 1402

<211> 384

<212> DNA

<213> Eucalyptus grandis

<400> 1402

catgacccga	cgccgccggc	gaacgactgg	gtcatggaga	ccaggaagaa	ccactcggtg	60
tcggcggcgt	cgggttgccc	ggtcgggcct	acttcagctc	gaatcccgcg	tgggtcacgg	120
gggcccagag	gttggggaat	tgccgggtgcc	gatagggccc	ggcaggcgca	gatcttcggg	180
ttgcagacca	tcgcgtgcgt	ccctgttttg	aacgggtgtg	tcgaactggg	ttccaccgag	240
ccgatctacc	agagctccga	tctgattagc	ggaattaggg	ggctgttcaa	tttccatgaa	300
tcggagatgg	gatgcgggtg	tagggttttg	aatagcgagc	atgacccggc	gtcgtctttg	360
atctgcgatc	cgccagtcac	gatg				384

<210> 1403

<211> 380

<212> DNA

<213> Eucalyptus grandis

<400> 1403

ctctctctct	ctctctctct	ctctctctat	ctttgatacc	caaacaaaac	acacggaaaa	60
gaaaaaccca	caagcacgcc	atggacaaca	atggtgagga	ataccagaac	tattgggaga	120
cgaccatgtt	ctacaaaaat	gaagagctcg	acagttgggt	ggacgaggcg	atatccgggt	180
actacgactc	gagctcccct	gacggggcgg	cgtcgaccgc	tgcttccaag	aacatcggtg	240
cggagaggaa	ccgaaggaag	aagctcaacg	agaggctatt	cgcattgagg	gcggtggtgc	300

ccaacattag	caagatggat	aaggcatcca	tcatcaagga	tgcgattgac	tacatccaag	360
agttgcacga	tcaagagaga					380

<210> 1404
 <211> 432
 <212> DNA
 <213> Eucalyptus grandis

<400> 1404						
ccaacatcgt	tctcgagaac	cccactccat	cccagttcga	cccatctgag	aacaagtcaa	60
cccagatcgt	caaaatcgaa	tcttgactcg	agggagaagc	ggagaatgac	gaagcgcagc	120
gcagccaagg	ccgcggcggg	gcacgagggc	gagggagcga	ggagcagct	gaagttcaga	180
ggggtgcgga	agaggaagtg	gggcagggtg	gtctccgaga	tccgcctgcc	caacagccgg	240
gagaggatct	ggctcggctc	ctacgacacc	cccagagaagg	cggcccgcgc	cttcgacgcc	300
gccgccttct	gcctcggccg	ccccgcgcgc	aagctcaact	tccccggcag	ccccccggag	360
atctccggct	cggcgtccct	ctcccccgat	gagatccagt	cggccgcggc	gagctacgcc	420
aacttcgggg	cc					432

<210> 1405
 <211> 345
 <212> DNA
 <213> Eucalyptus grandis

<400> 1405						
ccgacctcct	ctctccacgc	ggccactgtc	ccgtcgcgcg	aattcgcccc	gccgtcgtag	60
gagaccgcat	cctccgccgc	cgcggcgatg	gccccagctt	cattccctgc	gctagcaacg	120
cattttcaatg	gaagtatgct	caatgatact	aactcatctg	gtgaaagtca	cacacgtaat	180
ggaaggccac	gaggagatgc	caggggaagg	aatcaattac	ttcctcgta	ctggcccagg	240
ataacagatc	aagagctaca	acaaatctca	ggagactcga	actctgtaat	cactcctctg	300
tttgagaaaa	tgttgagtgc	tagtgatgca	ggtaaaattg	gacgt		345

<210> 1406
 <211> 471
 <212> DNA
 <213> Eucalyptus grandis

<400> 1406						
actgggcaaa	atattcctat	ctctactgca	tatatagggc	tcgggagaga	gagagagaga	60
gagagactgc	acagtatagt	aataactaaat	aatacacctc	ctttagactt	gactgaagat	120
acaggcacia	ccctagtaag	agaagaagga	gaaggggaag	atgaaggtga	gaaggaagct	180
gagggagccc	aggttctgct	tccagacgag	gagcgaggtg	gatgtgttgg	acgatggcta	240
caaattggagg	aagtacggcc	agaaagtggg	caagaacagc	ctccacccca	gaagttatta	300
ccgttgact	cacagtaatt	gccgagtga	gaagaggggc	gagcggttgt	cggaagattg	360
tcggatggtg	ataacgacct	acgagggcag	acataaccat	tccccgtgcg	atgactcgaa	420
ttcatccgaa	catgaagggt	tcaactcggt	ctagtattgc	cccaagacag	a	471

<210> 1407
 <211> 471
 <212> DNA
 <213> Eucalyptus grandis

<400> 1407						
agcaagcaaa	agaggaaacc	agataaaaagc	agacacctcg	gtttcacgtt	ctctactaca	60
gaattccgga	gatggtgaag	agagacagag	aggacacgga	ggtcgaagcc	ctggccctgg	120
ccaactgctt	gatgctcctc	tcccaggtcg	gcgagagcac	cgactcgcca	tggtgaacc	180
acaaatcccc	gcctacggag	cggatgttcg	cgtgcaagac	gtgcaaccgc	gagttttcat	240
ccttcaggcc	actcggaggg	cacagagcca	gccacaagaa	gccgaagctg	tccggcgatc	300
tctttcacct	agggcgctcc	gcggattcct	caccggccaa	gccgaagacg	cacgagtgcg	360
ctatatgcgg	cctcgagttc	ccgcttgcca	agcccttggc	ggtcacatga	ggaggcacag	420
ggccgccatg	gcggagagct	tggcgacggc	cgaaaagcct	gtgccggtgt	t	471

<210> 1408
 <211> 303
 <212> DNA
 <213> Eucalyptus grandis

<400> 1408
 gcgccccttct cgaatccata cgaggagctg gcgaaccact tgctgctgga cgatccccgaa 60
 tcggacctttt cggttcactt cccttccctt gcttccgac ccgaaccctg caactccgct 120
 gtatctccta gtttttagcgt ggatggggat ttcttttccg actatggcga cacctcggat 180
 cccacgttga aatacataaa tcagatgctc atggaggagg acatagatga caaacctctg 240
 atgtttcatg atcctttagc tctcaagctg cagagaaatc cttatacgat gctctctgctc 300
 cga 303

<210> 1409
 <211> 367
 <212> DNA
 <213> Eucalyptus grandis

<400> 1409
 aatctcagga gactcaaact ctgtaatcac tctctgtttt gagaaaatgt tgagtgcctag 60
 tgatgcaggt aaaattggac gtttagtgct gccaaagaaa tgtgccgagg cctatttttcc 120
 gcctattttcc cagcctgaag gattgccgct caaagttcag gatgccaaag gctcggagtg 180
 gatattttcaa tttcgattct ggcccaataa taacagtaga atgtatgttc tgggaaggagt 240
 caccgccgtgc atacagtcca tgcagttgca agcaggagac atagtgcacat ttagtcgggtt 300
 agaaccgcgag ggaaaattgg tcatgggatt cagaaaggct tcaactgctc cctcatctga 360
 tcaggaa 367

<210> 1410
 <211> 353
 <212> DNA
 <213> Eucalyptus grandis

<400> 1410
 cattaccacc accaccacca aaactctctc tctacccttc tctctctgcc cttctctctc 60
 tagaattttat ggcatgaag gagaaggcgg gttcggggcg cgccgccagg ctggcggtga 120
 gggaggcgca ctaccggggg gtgaggaaga ggccgtgggg gcggtacgcg gcggagatca 180
 gggacccgaa gaagaagagc cgggtgtggc tgggcacctt cgacaccgcc gaggaggccg 240
 cccgcgccta cgactccgcc gccgcgact gccgcggctc caaggccaag accaacttcc 300
 cctccccctc ggagcgcccc gtccctctcc tcgccggagc cgacggagga gca 353

<210> 1411
 <211> 586
 <212> DNA
 <213> Eucalyptus grandis

<400> 1411
 atcaggtccc gcgccactcc attcgcgnat ctccgacctc ctctctccac gcggccactg 60
 tcccgtcgcg cgaattcgcc ccgccgtcgt aggagaccgc atcctccgcc gccgcggcga 120
 tggccccagc ttcattccct gcgctagcaa cgcatttcaa tggaagtatg ctcaatgata 180
 ctaactcatc tggtgaaagt cacacacgta atggaaggcc acgaggagat gccaggggaa 240
 ggaatcaatt acttccctgt tactggccca ggataacaga tcaagagcta caacaaatct 300
 caggagactc gaactctgta atcactcctc tgtttgagaa aatgttgagt gctagtgatg 360
 caggtaaaat tggacgttta gtgctgcaa gaaaatgtgc cgaggcctat tttccgtcta 420
 tttctcagct tgaaggattg ccaactcanag ttcaggatgc caaaggctcg gagtggatat 480
 ttcaatttcg attctggccc aataataata gtagaatgta tgttctggaa ggagtcacgc 540
 cttgcataca gtccatgcag ttgcaagcag gagacatagt gacatt 586

<210> 1412
 <211> 427
 <212> DNA
 <213> Eucalyptus grandis

<400> 1412
gcttttccctt acctaagatc gccagtagat catcgctcca tttcgctcct tctcctccat 60
cgtcttccgg ttggtgtttc ggggaagccat ggatcttgag taccagaag agttcttggg 120
cggtgccac gaccaccatt cgcagatctc caaggccaag cgcacgaagc gccagcggcc 180
ggcctccccg agcggcggcg gctgctcgcg cgcgcacgcc ggctggcca ccgggagggc 240
cggcttctac gtctacgagt gcaagacttg cagccgcgtg ttcccgtcgt ttcaagcgtc 300
aggagggcac cgtgccagcc acaagaagcc caagtccacg gccgatcctg accagaaaat 360
caagccgtcg acggtggtcc tgggcttgga cgcaattgac gacgaagacg aggggcactc 420
cgtaaa 427

<210> 1413
<211> 375
<212> DNA
<213> Eucalyptus grandis

<400> 1413
gaaagtgacc cactggctgc cctgtgtaat ctggaaatcg acaatgtgaa ttctctgttc 60
gttttccatg gctttgggtga tgatgacatt tgtggacaca tatgcaaact tccagtaggg 120
gcagatctga tagagaacct gcatgttagt cagcaattct gagctcgtag gttcttcgca 180
cttgagcttt cggtaaatta tgctcccgga aaatttcaat ttgcacctaa gcccttccaa 240
gaggtaaagca ccaagacgct gaatcgggtc gcccataacc gacaccattt gctccagcat 300
atccattaga gctgctgcac tagaagtatc ggcatcagag attgcccctg ccaggcgatt 360
accacttggt tcaag 375

<210> 1414
<211> 369
<212> DNA
<213> Eucalyptus grandis

<400> 1414
ctcaaaatgg acttggtgctg ataacagttg ggatccagaa agatcatctt gctcggcgga 60
tcaagacttg acggcagaag agcttgaaga tatgctatct aataataatc cagcaccttc 120
taagaaagct aaggctccta aacaagagaa tatggaagca ctggaggggc tggatactct 180
tgccaacctg gcaatcttag gagaaggcga ggtgctccca tcatcttctt catcatctca 240
agccacaaca aagcacctc gacaccgacc aggtgtttca tgtattgttt gtatacaacc 300
ccccagtggg aaggggcccaa aacacaagcc aacatgcaca tgtaatgtct gtctgaccgt 360
aaagcgcgt 369

<210> 1415
<211> 313
<212> DNA
<213> Eucalyptus grandis

<400> 1415
gccgattacg acgagggcgg cgacgacaat ccggggagcc gccacccggt gaccggcgag 60
ttcttcccgg tggaggagga ggaggagctg gaagaggatg gcgagcgggc aggaatgggg 120
ggagccgcag tgccgcggg gttcccagag gcgactggg tcggagtcag gttccgccag 180
tcggatcacc atccaatcgg atcgggcaag ggctcaccga tattggaggg ttcacagccc 240
atgaagaaga tcaggaaagg gccgaggtcg cggagctccc agtatagagg ggtcactttt 300
tacaggcgaa ctg 313

<210> 1416
<211> 489
<212> DNA
<213> Eucalyptus grandis

<400> 1416
ctcttcgaaa accctttctc tctcttcgat ctctctctct ttctctctcc tctgtgattg 60
cagatcaggc tcccacgcc ttccattcgc gcattctcga cctcctctct ccacgcggcc 120
actgtcccgt cgcgcgaatt caccgcgcc tcgtaggaga ccgcatacta cgccgcgcgc 180

gcgatggcgg	cgccacgagg	agatgccagg	ggaaggaatc	aattacttcc	tcgttactgg	240
cccaggataa	cagatcaaga	gctacaacaa	atctctggag	actcaaactc	tgtaatcact	300
cctctgtttg	agaaaatgtt	gagtgttagt	gatgcaggta	aaattggacg	tttagtgctg	360
ccaagaaaat	gtgccgaggc	ctattttccg	cctattttccc	agcctgaagg	attgccgctc	420
aaagttcagg	atgccaaaagg	ctcggagtgg	atattttcaat	ttcgattctg	gccaataat	480
aacagtaga						489

<210> 1417

<211> 372

<212> DNA

<213> Eucalyptus grandis

<400> 1417

catcggcgag	ctccacggcc	actccggcat	cgcgcggtc	atgctcttct	acgcccgcag	60
cctcttcggc	ctcgtcgacc	accggaatgg	catgggcgtc	gcgaacgccc	gcctcgtgta	120
cttcgacggc	cacctcctcg	cgatgtccga	ggacgacctc	ccctaccacg	tgcgcgtcac	180
gcgctccggc	gacctcgaga	ccgtcggccg	ctacgacttc	gccggccagc	tcgactctcc	240
gatgatcgcc	cacccgaaga	tcgaccggc	ttccggcgag	atgttcgccc	tcagctacga	300
cgtcgtccgg	aagccgtacc	tcaagtactt	ccgattctcc	aaggacggcg	agaagtcccc	360
cgacgtcgag	at					372

<210> 1418

<211> 354

<212> DNA

<213> Eucalyptus grandis

<400> 1418

gcggaatttg	aatatcagag	gagcacaag	cagccagcag	tttgctgga	ggagaatgag	60
ttagctgaca	ttttcgatag	ggttctactt	tgtgtccga	cgggaaataa	gcctgattct	120
aaatctcctg	gttctagatt	tgaggatgcc	tcaaataatg	gggcaagcca	gaatgtacag	180
aaaaatcgca	atcacctgca	ctttcagccg	aacagctctg	tgtcaaaaaa	ccaatgagtg	240
ataagaagga	agtcgtggat	ctgaggaacc	ttctgtgttc	ttgtgcacaa	gcagttgccg	300
tggaggatcg	taaaaatgct	aatcaatatc	tgaagcagat	taggcagcac	tcct	354

<210> 1419

<211> 540

<212> DNA

<213> Eucalyptus grandis

<400> 1419

ctcaatcgga	gttgggctgg	ctgtgatatc	tgtgtccgcg	gccagggccg	ccatgctttt	60
tgccagcccg	atggcggttg	aaatcgctga	accgtaagaa	cggcagtaaa	caagtgtcgc	120
atgagtacgg	ctttttgccc	ctgtgtgtcg	ccatgtgttt	cttcaaattg	cccttcaatg	180
caaatcgttt	cccgcatgga	tcacattcga	acgggcgcac	cttcgaactc	gaatgagatg	240
cgacatgacg	cgttagtgtc	tcctcgaaat	gaaaagactt	tccgcaaagt	ttacacggga	300
actcgcgag	cacatcgtag	tgtgtaggaa	catattcgct	tcctgaatca	ttgtccatcg	360
ctgtagaatc	attttcttct	tcttcgtag	actcgttcga	attgttggtt	tccgttgagg	420
tcgtcgcaga	ttcaggagat	ccagcaggat	tggagataac	tggctcatcc	acaggcaaca	480
acgcgatttc	ggcgagattt	tccatcagga	tgggtccac	agtgaccgga	gggccccctg	540

<210> 1420

<211> 349

<212> DNA

<213> Eucalyptus grandis

<400> 1420

gatgggttca	aacagtctta	tgggcttggt	gggaagagat	catcatcgat	tcggcctccc	60
gaacaagaga	gaaagaaagg	ggttccttg	accgaggaag	agcacaagct	ctttttgatg	120
ggtctaaaaa	aatatgggaa	aggtgattgg	agaaacatct	ccaggaactt	cgtgatcacg	180
agaacaccga	gcgaagtagc	tagccacgca	cagaaatact	tcatacagaca	actttcaggt	240
ggaaaagata	agagaagggc	cagcatccac	gatatcacia	ctgtgaatct	cacagagact	300

agaactcctt caccagatga taaaaggccg ccttcgccag atccttcat

349

<210> 1421

<211> 378

<212> DNA

<213> Eucalyptus grandis

<400> 1421

ccgaggccga	cttcctggcc	aaacactcca	agccccgagat	cgtcgacatg	ctgcgcaagc	60
acacgtaccg	cgacgagcta	gagcagagca	agcggagcta	caggggctcc	gccgcggaac	120
gggccgggag	ggggcggttc	gggccggggc	ggacagagtg	gtcggccgcc	gcccgggagc	180
agctgttcga	gaaggccgtg	acgccgagcg	acgtggggaa	gctgaaccgg	ctggtgatcc	240
cgaagcanca	cgcggagaag	cacttcccgc	tgccggggcg	gccggcgggc	acgatgaagg	300
gcgtactgct	caacttcgag	gacgtcggcg	ggaagggtgtg	gcggttccgg	tattcggtact	360
ggaacagcag	ccagagct					378

<210> 1422

<211> 358

<212> DNA

<213> Eucalyptus grandis

<400> 1422

ctcctctcct	ccctcactct	ccctcttctc	tcctccctcc	tctcctccgg	gtacatgcaa	60
gaattcgagg	gggagagagg	gagagagcgt	gctttgaaca	tggggaggag	cccagggtgc	120
gacaaggacg	ggctcaacaa	aggagcgtgg	acggccgcgg	aggaccagat	cctgatggac	180
tacgtcaagc	tccacggcga	gggcaaatgg	agccggctct	ccagggaaac	cgggtctaaga	240
agatgcggca	agagctgcag	gctgcgttgg	atgaattacc	tgaggcccga	catcaagaga	300
gggaacatct	cgcccagcga	agaagaacta	atcatccggc	ttcacaagct	attggggca	358

<210> 1423

<211> 373

<212> DNA

<213> Eucalyptus grandis

<400> 1423

catcctatga	agccggaatc	tgttgaagta	ctgaatttctg	gagatagtgg	gagcgggaagg	60
ttgcttttga	gtcattcaca	ggtcgcagtt	gcagaggagc	ctctgaacca	cgtcgaggcg	120
gagaggcaga	ggagggagaa	gcttaatcag	aggtttttacg	ccctcagggc	cgtggttcca	180
aatgtatcaa	agatggataa	ggcttcactg	ctccaagatg	cggagtctta	tatcagggag	240
cttaacatga	acctacaagc	tgacagagtct	gataaggagg	atttgaagaa	gcagttggat	300
gaactaaaga	agcgatcatc	ggataaagaa	tgtatcccgg	tggatcaaga	tcgcaagatg	360
gcaaaaccta	cgg					373

<210> 1424

<211> 425

<212> DNA

<213> Eucalyptus grandis

<400> 1424

gcgaaccgag	cgcgaaatcg	ctaattgttca	tcggaagctt	ctcataagag	gaggggtccg	60
aggcttcaat	tttcgagcag	ggctcatgga	tcgtcggttc	tacaccaacc	ccttcgtgca	120
tgatcaagaa	gaagaccccg	agcccagcga	aggccctgat	tcgccctcct	cgggggaaga	180
ctccaangtg	aatgctatcg	agccgtcnca	aaagagaagg	aagagcgtga	agaancgagt	240
ggtgtcggtt	ccgatcgcg	gcgaccccg	gggatccaag	agcaaagggg	aggcctaccc	300
gccgtccgat	tcgtgggcgt	ggaggaagta	cgggccaaaag	cccatcaagg	gctcgcctta	360
cccaggggga	tactaccgat	gcagtagctc	caagggtctg	cccgccagaa	agcaagtggg	420
gcgca						425

<210> 1425

<211> 434

<212> DNA

<213> Eucalyptus grandis

<400> 1425

gcacttttcag	cttcggcatc	ctgaaggccg	gcgagggagg	tgatggtgtc	gcggacgacg	60
aactcggggg	gacgaggcag	ctgttcccgg	tgagggaggt	ggatgcggat	atggagtggt	120
gcggcgagtc	gtcctcgctt	gataagagga	gcgatgtctt	cttggttggt	gcttgtaagg	180
aaaaggaagg	tccgaggctg	gcgatgccgc	agcagcggag	gaagagcagg	aggggaccga	240
ggccaaggag	ctcgagctat	agaggggtta	ctttttatag	gaggactgga	agatgggagt	300
cgacacatag	ggactgtgga	aaacaagtgt	atttgggtgg	attcgacact	gcacatgctg	360
cagctagacc	tatgatcgag	ctcaataaaa	ttcaggggct	tgatgcaaca	taaatttcaa	420
tttgagtgat	tatg					434

<210> 1426

<211> 414

<212> DNA

<213> Eucalyptus grandis

<400> 1426

gccagtatga	actctccttt	agcccagctt	gttaacccaa	gaaggatgca	cacctacgag	60
ccatttgacc	agttcccat	gtggggagac	accttcaaag	ctgacaaggt	taaaaatctt	120
gaggcatcgt	catctgtgat	tgtgcatgca	gtagatgatg	gattggacaa	gaagtttgaa	180
tatgtttctc	atgaatcggc	agaaaattcc	agctccagga	gcgatcaaga	agcaaataga	240
cctgacaagg	tacagagacg	tctagcacag	aaccgtgaag	ctgctcgaaa	aagccgtctg	300
cggagaaga	aatatgtaca	acaactagaa	tcaagccgct	tgaagctagc	acagttggag	360
ctggaactcg	ggagagctag	gcagcaaggg	ttgctcttgg	gaaatggatt	cgac	414

<210> 1427

<211> 332

<212> DNA

<213> Eucalyptus grandis

<400> 1427

aaaagcccta	gctaaatcaa	ttaacaagcg	ctaataccta	aagcacaggc	gaagatttca	60
ctgttctgga	gagagcttga	tcttcagggg	cgctcgagaag	cgcggttctt	tcgaggggtg	120
ggggctctcc	acctcgctcg	cgcccagcac	gatgaacccg	gtcgggaact	ccggcagcgc	180
gggcacgttc	aggtcgaagt	tgcggcggcc	gctgtcgat	ccgagcgcgg	gcggggccgc	240
ggaccccaag	ccctcgagcg	tggtgacccc	gctgttgggc	gagccgctgg	cgccgccatc	300
gtagtggcaa	cgcttgtgcc	cgcccagggc	ct			332

<210> 1428

<211> 318

<212> DNA

<213> Eucalyptus grandis

<400> 1428

gatccaccca	actggccaca	gcagcaagca	aatcaacaat	caggagcaag	cagtgcgatt	60
cctcagcttc	cgctgccgcc	gccccctctg	ccagccggag	ggggcggtac	aggctccatc	120
cggccaggtt	ccatggccga	tcgggctcgg	ctggccaagg	ttccgcagcc	cgagcctgga	180
cttaagtgcc	cccgatgcga	ctcgacaaac	accaagttct	gctacttcaa	caactacagc	240
ctcacgcaac	cgcgccactt	ctgcaagagt	tgccgcgggt	actggacccg	aggaggtgcg	300
tgaggaacgt	gccagtgc					318

<210> 1429

<211> 349

<212> DNA

<213> Eucalyptus grandis

<400> 1429

gaaagcccta	agaaagcaga	tacaacagga	aaaggaggac	accaatacag	atggttttac	60
agaaagattc	acaagaacta	aaccgtcgct	gatcttaggc	acgagtcaag	ctgcttgagt	120
ggcgccatcc	ttgcagttgt	cgagatccga	ttcattgact	gaagaaggcg	ccttgataaa	180

tgctgactgt	cgagatgttt	ccccgagaaa	cttcaaagag	agtgggtgcag	gttcattctc	240
agcaagactt	agctgagaca	ttccaactat	ttgggtcgata	tttaggggtt	cttttggaaat	300
tactgggatt	ggcttttagca	cacggtgatg	agatgtctcc	accaccctt		349

<210> 1430
 <211> 350
 <212> DNA
 <213> Eucalyptus grandis

<400> 1430						
aacgcccgtt	ctccacaaca	agcgactctc	tctctttctc	tctctcctcc	aactaaaatc	60
ccaagcctcc	caagtctctc	cgaccatggc	tccccgggag	aggcccaacg	ccgtcacctg	120
cgccgtcagc	cccaggcccc	agggcggcgc	caaggagatc	cgcttccgcg	gcgtcaggaa	180
gcggccgtgg	ggccgctacg	ccgccgagat	ccgccgaccca	ggcaagaaga	cccgcgtctg	240
gctcggcacc	ttcgacaccg	ccgaggaggc	cgccccgcgc	tacgacacgg	cggcgcgtga	300
gttccgcggc	gccaaggcca	agaccaactt	ccccaccgcc	gacgagctcg		350

<210> 1431
 <211> 350
 <212> DNA
 <213> Eucalyptus grandis

<400> 1431						
aaccgacgac	acaggtgaca	agaatcacag	gttcgaaggg	ggccaattgg	gtgttgacgc	60
agcttctgat	tccagtgaca	gatcaaaaaga	aaaagccaca	gatcagaaga	ctttacgcgag	120
gcttgctcaa	aaccgtgaag	ctgccagaaa	gagtagatta	aggaaaaagg	catatgtcca	180
acaactggag	agtagcaggc	tgaaactcac	ccaactagag	caagaactgc	agcgagcccg	240
tcagcagggc	attttcattt	caggtagtgg	agaacaatcc	cactcaatga	gcggaaatgg	300
tgccttggcc	tttgatgttg	aatatgcacg	ttggcttgaa	gagcacaaca		350

<210> 1432
 <211> 317
 <212> DNA
 <213> Eucalyptus grandis

<400> 1432						
cggggataca	ggtgctggca	ggtttaacta	cttaaagtat	aggtattatt	atcatcacaa	60
aggtcggggt	ctggctgtta	atggacatat	gaatgggtact	tattatggca	ctggaagagg	120
gtcttccggt	ggaacataca	gtactggttg	tagtanaggc	tgtgggtggca	ggtcagacta	180
taagatcacg	agaaaagata	gggaatctat	gccaacatg	agcgagcctc	ttgttgccctc	240
tttgtatgtt	cctaggaatg	ataagcttgt	gaaaattgat	ggcaacttga	taattcattc	300
tattatggcg	agtgaga					317

<210> 1433
 <211> 370
 <212> DNA
 <213> Eucalyptus grandis

<400> 1433						
gctcaatgta	gtcatcaaga	aataaacatc	ctttagcaac	gaaagccaga	aagcctgaat	60
ctctaaccga	aacttacatg	cacgtgcata	ttagggccata	aaaacatgac	agataaaaata	120
caaaatccct	ttttctaata	tgtaacattt	ttcggcgagat	ttctaataac	attactcttc	180
atcccaattt	tggtgcgcac	cgcttcactc	cctgatcgat	tcactctctc	tatcaccttc	240
agcctgacca	tttgttctct	tgaccgtaca	gtggtagtta	atcccatact	cctgtacctt	300
gaggccagtg	cagcagtaat	tgccgcatta	tttcagtggt	atggacgagg	tttctggcgg	360
tagtatctca						370

<210> 1434
 <211> 210
 <212> DNA
 <213> Eucalyptus grandis

<400> 1434
 gaaaagcgta cgcgaggagg cagcatgcgt ggctcaccgg agctaagag gttgatagca 60
 agactttttc gagagctatt cttgcaaaga gtgctcgtat tcagaccgtg gtttgcatcc 120
 ctcttctaga cggcgtagtg cgatttggca ccacggaaag gggtcaagag gacatttcac 180
 tcgtcaatca tgtcaaaacc ttcttcgttg 210

<210> 1435
 <211> 557
 <212> DNA
 <213> Eucalyptus grandis

<400> 1435
 ggctcgttcga caacaccctg tcgctgctga gccgcgccga gcccgaccgag gtgtcgcagg 60
 tgccgggtcag gccctgcgcc gtcaagtcgg aggactccga ggagagcagc aagacctcgg 120
 tccccagaga ccgcctgga tgctacaaga gaagaaagac tcgggataca cagataagga 180
 tggatcataa tttgattgac gacgggcacc agtggaggaa atatggccag aaagcgattc 240
 ttaactcggg gttcccaagg aactacttca ggtgtactca caagatcgac caaggttgctc 300
 tagcgaccaaa acaggtccaa aaggtacagg acgctccgcc cctctatagg accatatacc 360
 agggccaaca cacctgcaag aacctcatcc tgaaatcccc ctccctcatc ctggactcgc 420
 ccgagccctg gggactcctc catcctcgtc agcttcaaca ccagcctccc tccaagcaa 480
 gacgacaaca acaacagcag cagcaacccc ttctcctctt cgactttccc gtcggtgaag 540
 cacgagcccc aagctgc 557

<210> 1436
 <211> 438
 <212> DNA
 <213> Eucalyptus grandis

<400> 1436
 aatcaacacc nctcccaat ttctctctnt aagatcccac cccaaccgcc accctcaatc 60
 tctctctttc tctctcttct tcagtgtctg cccgctctgc gacaagggct tcccctccta 120
 ccaggccctg ggcgccaca aggccagcca ccgcaagcac gcctcctccg ccgcggccgc 180
 cgccgggggt gacgaccagc cgaccacctc gagcacctcc gcggcgacga cctcctccgg 240
 cgtctccggg aaggtccacg agtgcctgat ctgccacaag agcttcccca ccggccaggc 300
 gctcggcggg cacaagcggg gccactacga ggccccgcc cccatccccg cctccttctc 360
 cgccccctcc gccgcgccg ccccgccgcg cagcggggtg agcgtgtcgg agggcggtgg 420
 gtccacgcac acgcagag 438

<210> 1437
 <211> 327
 <212> DNA
 <213> Eucalyptus grandis

<400> 1437
 tctctctctc ttctgtttctc ccgtttctct ctctctacct ctgcgcaaga aaccgccagg 60
 aaaggaagga aggtaaaaag aaaagaaaag gaagccatgg ctccgagaga aaagcccagc 120
 gtcgcccga tcccaaacc taacggcgct aaggaaatcc gtttcgggg cgtccggaag 180
 aggccctggg gccgctacgc cgccgagatc cgggaccccg gcaagaagac ccgggtgtgg 240
 ctccggcacct tcgacacagc cgaggaggcc gccgcgccta cgacaccgcc gccgcgaggt 300
 tccgcggcgc caaggccaag accaact 327

<210> 1438
 <211> 360
 <212> DNA
 <213> Eucalyptus grandis

<400> 1438
 gcgagagcta accgcaaaaa ttaccagct ctcactcttt ccaacttcaac aaaaataccg 60
 gaccgaaaga atgtgtatc atgtgtctat ttgatagcat aagaacgggt acataccgtg 120
 tcaaggacct ccatgaacaa ggatgaaaaa ctgggtaatg cctggaaaaa tcttggcaga 180

cccgttttaa	gattgttcaa	ggtacttgtc	ctcgtcactt	ccactgcctt	ggaatgtttc	240
agcattttctt	cttctaccct	cctttggcag	gttgcaagtt	caagtttctt	ctcggccagt	300
gggtcccagag	catccagcac	ctggccattg	tcgggcccag	gatcagggaa	ccctacacca	360

<210> 1439

<211> 269

<212> DNA

<213> Eucalyptus grandis

<400> 1439

ccgaaaacgga	atcgtttcttg	gggtttgaag	cgaagccggt	aattatcggg	gaaacggcct	60
cgaaaacctc	gcaatcaagc	aagaagccat	cgctgaagat	cgcggtgccg	agaaaagtcg	120
agctgctgca	attctccaag	gcgaatccga	tgggtcaagg	agggttcgaat	caagcacgcg	180
acgagcagag	gcactataga	ggagtccggc	ggaggccttg	ggggaagttc	gcggcggaaa	240
tccgagaccc	caaccggaag	ggctcgcgc				269

<210> 1440

<211> 351

<212> DNA

<213> Eucalyptus grandis

<400> 1440

aagaagacga	agcagctcat	ccgaccatgg	tgttggtatt	gcgaacgaga	atttgaagat	60
gaaaaagttc	tcatgcaaca	ccaaaaggca	aaacatttca	aatgtggaat	gtgtcctcgt	120
cgtttgaata	ctgctggtgg	tttggtgtgt	catattcagc	aagtgcacaa	actcgaaccg	180
gaaaaccttc	cacgtataga	aaatgcacta	ccaggaagag	atggctacga	agttgaaatc	240
tttggtatgg	tgggaatccc	agcacctgat	gtcgccgact	acaaacgacg	caaggaaatc	300
gaactgggac	tggcagcagg	atccatttca	cagcctcctg	ccaagcgtca	g	351

<210> 1441

<211> 476

<212> DNA

<213> Eucalyptus grandis

<400> 1441

gatagtccaa	gctctctgcc	tctctctctn	tctgtattct	ctatcttcat	ctgcggcgctc	60
ttgatcgctc	tcatctcgct	ctcgcaagtg	ttgtctctcg	tcttctctctc	tgtccgccat	120
tcaaagatca	cctattcttt	ccgtttggtt	tcgggtgact	aagaactctt	tctctctctc	180
gctctgagtc	actcttgctt	tctcccgaact	tttctgggat	tgatgaaaat	ggcggaaaga	240
tcgaacttgt	cggacccgga	aacaagcccc	ttgaactcac	cctccacctc	ctccgcttct	300
tctcgtact	cacccgaccc	gcgcccgcgg	gcgggctcgc	ccgcccgcgg	ccgcgacccg	360
ttgagatcct	ccaagcggag	caagcacccg	gtgtaccgcg	gggtccggat	gaggaaactgg	420
ggcaagtggg	tgtcggagat	ccgggagccc	cgcaagaagt	cccgcactctg	gctcgg	476

<210> 1442

<211> 315

<212> DNA

<213> Eucalyptus grandis

<400> 1442

gcaagnactt	tgaacctggg	aatcatgtna	aggctgtttc	tggtncccaa	gaaggtgcta	60
ctggatgggt	tgtaaaagtg	gagcaacatg	cgctgatcat	tttgtcagat	acaacgaagg	120
aactattacc	gtttttgcag	atgatgttgt	tgagagttca	gaggtaacat	ntggaataac	180
cagaattgga	gactatgagc	ttcacgacct	tgtgctgctg	gataatacca	acttcggtgt	240
cataattcgt	gttgaaagtg	aagcttttca	ggtaggtgac	atgcactgag	gcaagtctct	300
tggacatgcc	cttca					315

<210> 1443

<211> 338

<212> DNA

<213> Eucalyptus grandis

<400> 1443

ctcagccgag	cttcagaggg	aaaccgccat	gccctcgca	aagtcactct	gccacactta	60
tcgggaacga	taagatggtc	atttttgggg	gtagtggcca	aggcgaagcg	aactattgaa	120
cgacctgcat	attctggacc	tagagacgat	gaggtggatg	tctcctgagg	taaaaggcga	180
gattcctgtc	cgtagggaca	gtcacagcgc	tggtgccatg	gaaaacaaat	tagtggtgta	240
tggtggagat	tgtggcaatc	ggtatcttgg	cgatgttgat	gtacttgata	cggacacaat	300
gacctggtca	aagttgactg	ttcaaggatt	ttcacccg			338

<210> 1444

<211> 409

<212> DNA

<213> Eucalyptus grandis

<400> 1444

gccaggcca	caaccatcaa	caccaccacc	agtttgccg	tgatcattct	tctccctctt	60
cggtcgccat	ggctgggtgcg	gcaggggggt	tagagagnga	gaacggcgga	aatgggagat	120
ggcctatgca	ggagactctc	acgctcctcg	agatcaggtc	cgaggctcga	ctctagggtt	180
aaggaggcca	acaaaagg	tcctctttgg	gacgaacttc	cggattatgt	cggagaaga	240
tggttatcaa	cggagcggca	agaaatgcag	ggaaaaattc	gagaacttgt	acaagtatta	300
caagaagacg	aatgaacgaa	aagcgggtag	gcaagacggt	tagcactaca	ggttctttcg	360
tcaagctcga	agctctctac	ggagagaacg	ccaatttgaa	ttccatcct		409

<210> 1445

<211> 304

<212> DNA

<213> Eucalyptus grandis

<400> 1445

gaactgttgt	acatggatgg	acaggctgac	atcaagcagc	gccaatcctc	cattaatgcc	60
ttcaatgacc	caacgagtga	agtgaggggtg	ttgcttgcc	ctaccaaagc	atgttccgaa	120
gggattagtc	tggtgggtgc	ttcaaggggtc	gtgttactag	atgttggtgtg	gaatccgtca	180
gttgacaggt	aggccataag	ccgtgctaca	gacttggaca	gaagaatgcg	gtctatatatt	240
atcatctgat	cacttctggg	acaatggatg	ctgagaaata	ctgtcaacgg	gtgtaaaagg	300
acac						304

<210> 1446

<211> 332

<212> DNA

<213> Eucalyptus grandis

<400> 1446

ggctccccgg	gagaggcca	acgccgtcac	cgctcgccgtc	agccccaggc	cccagggcgg	60
cgccaaggag	atccgcttcc	gcggcgtcag	gaagcggccg	tggggcgct	acgccgccga	120
gatccgcgac	ccaggcaaga	agaccccggt	ctggctcggc	accttcgaca	ccgccgagga	180
ggccgcccgc	gcctacgaca	cgccggcgcg	tgagttccgc	ggcgccaagg	ccaagaccaa	240
cttccccacc	gccgacgagc	tcgtcgtcgc	cgctcgccgc	gccgcccga	gccccagcca	300
gagcagcacc	gtcgacaacg	cctccccctcc	gc			332

<210> 1447

<211> 349

<212> DNA

<213> Eucalyptus grandis

<400> 1447

gtaaaacaac	ctccctcagc	tcctcttcac	cactggtttt	tgagatgac	tgtgtgctcg	60
gcgccgttga	ttattatgtc	ttattctgac	ttgctgaacc	tgtgttttgc	cgtgggcgtt	120
tggtgcaccg	cgtatattgc	ggctgccgtt	ctcgatcgcc	tccgggtctt	ccatactctc	180
tgttcgtttt	gatttcgata	gctgttttcg	aaggctaaga	tgggctacgc	acagctggtc	240
atcgcccttg	ccggcagtg	caagtgcact	tattgctcga	gtttgtatca	acattgtgaa	300
gctattgggc	ggacaatata	cattgttaac	ctagatcctg	cagcagaga		349

<210> 1448
 <211> 362
 <212> DNA
 <213> Eucalyptus grandis

<400> 1448
 ccgcaacgag gcgataccat ctccggcccg cgtcttgctc ttccctctcc aatcccatcc 60
 atccctccat ccatccatcc atccgcccga accctccctt tctctctcca tctctctcgc 120
 gcagcatgat tccgagccga gccgcccggg cgcgcgacga cgtcccggaa gtcgcccggat 180
 cggcaccgaa ggggcacgta caacagcagc agcagccgca gcaacaggtc ggcgcccggca 240
 gccaaagtac aggggcgtgc ggaggcggcg gtggggcaag tacaccgccg agatcagcga 300
 ccccgtaag aaggcacgcg tctggctcgg caccttcgcc tccgcccagg agggcgccgc 360
 gc 362

<210> 1449
 <211> 281
 <212> DNA
 <213> Eucalyptus grandis

<400> 1449
 cagcagacca gaccattcca ttccattcca tttcgcattc tctactacag actcgcagag 60
 atggtgaaga gagacagaga ggcgccggagg tcaagccct ggccgngggc aactgcttga 120
 tgctcctccc ccgagtcggc gaggcgcccg actcgaaccg cgaatcgccg tctacagagc 180
 ggatgttcgc gtgcaaagac gtgcaaccgc gagttcttct cattccaggc gctcggaggg 240
 catagaacca gccacaagaa gcagaagctg atccccggcg g 281

<210> 1450
 <211> 389
 <212> DNA
 <213> Eucalyptus grandis

<400> 1450
 aagaagacga agcagctcat ccgaccatgg tggttggtatt gcgaacgaga atttgaagat 60
 gaaaaagtcc tcatgcaaca ccaaaggcaa aacatttcaa atgtggaatg tgtcctcgtc 120
 gtttgaatac tgctggtggt ttggctgttc atattcagca agtgcaaaaa ctccaaccgg 180
 aaaaccttcc acgtatagaa aatgcactac caggaagaga tggctacgaa gttgaaatct 240
 ttggtatggt gggaatccca gcacctgatg tcgccgacta caaacgacgc aaggaaatcg 300
 aactgggact ggcagcagga tccatttcac agcctcctgc caagcgtcag aaaatggatc 360
 accggccgat atctcagagc gaattgaag 389

<210> 1451
 <211> 381
 <212> DNA
 <213> Eucalyptus grandis

<400> 1451
 gctgcgtgc cccttccctt ttgaaccgtt ctctctcccc ttctctctct accaactgtc 60
 ctctctctct ctctctatct gcaactgtgat tccctcacct tctcgcagcc tcgccatctt 120
 cctcctctcc aactcctcgc tccctcgtc gctcgtaca gtccagatat ttccgcgatca 180
 atctcgaaca gcttacggag atccttatgt atctggtgat aagcataaga gaacaccctt 240
 gtgaattccg tttcgatttg cattttaaaa gttcatagt tgaagagagt tggaaatctg 300
 aggtgcaaga tggggtgttc ctcatcaaag cttgacgatg aagaggcggg caagctatgt 360
 aaggatcgga agcgattcat t 381

<210> 1452
 <211> 381
 <212> DNA
 <213> Eucalyptus grandis

<400> 1452

ggcgagctct	cttatcttct	tcttctctct	gctccaccta	aaaccctcgc	ccggcaaaac	60
cgattcgagg	tcgagagtcg	agtaaagatg	aatgtggaga	agcttatgaa	gatggcgggt	120
tcagtccgca	ctgggtggaaa	gggtaccatg	agaagaaaga	agaaggctgt	gcacaagaca	180
actaccacgg	atgacaaaag	gctccaaagc	actctcaaaa	gaattggggg	taatgctatt	240
cctgcaattg	aggaagtcaa	cattttcaag	gatgatgttg	tcattccaatt	tgtaaatccc	300
aaagttcaag	cctctattgc	agccaataca	tgggtgtgca	gtgggtgctcc	tcagaccaag	360
aaattgcaag	atatcctccc	a				381

<210> 1453

<211> 378

<212> DNA

<213> Eucalyptus grandis

<400> 1453

tttttttttt	ttttttacgc	aatggaagaa	caaactgttt	tccaactgaa	agtacaaata	60
actcctaata	tagaattagg	taaattgctta	aatcctgcta	cctacaaatg	tgaaccacga	120
tgacaagggt	cccaacacca	aatgtttggg	acgatgtgaa	aacttgacga	cctgacagca	180
attagcatat	accaacctaa	cgaaactacg	agggggagag	agcttatggg	cacggcacca	240
gctatatcaa	gtacgcactc	tcttattgct	gcaggaggga	cacttgact	gcttgatgtg	300
ctcagccctg	gcgggagtaa	ttttcacgca	tttcccatgg	aaccacttct	cgcacatgtc	360
acaacagatc	cagaactc					378

<210> 1454

<211> 339

<212> DNA

<213> Eucalyptus grandis

<400> 1454

atgctgctgc	cacgaacagc	cgctttacaa	tcttttacaa	tccaagggcc	agtccatcgg	60
agtttgtcat	acctctggca	aaatatgtga	aagcagtcta	tcacacaagg	gtatctgttg	120
gcatgcgatt	cagaatgctt	tttgagacag	aagagtcaag	cgttcgtaga	tacatggggg	180
cgataacagg	cattagtgat	ctggatcctg	ttcgtctggc	aaactcacat	tggcgttcag	240
taaaggttgg	atgggatgag	tcaactgcag	gtgagaggca	gccaagagta	tccttggtgg	300
aaattgagcc	actaacaaca	ttcccaatgt	atccttctc			339

<210> 1455

<211> 372

<212> DNA

<213> Eucalyptus grandis

<400> 1455

gtcgggtgta	ggagattaat	gagacagcaa	agtaacatgc	catcctctgt	tatatctagt	60
cacagcatgc	atccttgggg	tctggccact	gcatctcatg	ccattgcaac	tggaactctc	120
ttttctgtat	tctacaaacc	aagaacaagt	aggtcagagt	tcattgtgag	tctcaataaa	180
taccttgaag	cacggggcca	caagctatcc	attggaatga	ggttttaa	gaaatttgag	240
ggtgaagaag	tttcagaaa	aaggttcagc	ggcacaatca	ttggtgtagg	agacagcatg	300
tcattctggat	ggactaattc	tgaatggaga	tccttaaagg	tccaatggga	cgaaccttca	360
tcaatcattt	gg					372

<210> 1456

<211> 436

<212> DNA

<213> Eucalyptus grandis

<400> 1456

gcaacgtagt	gtttccatag	caactcaaac	aacaaaggaa	cttgttttta	aggattatgc	60
tctggagtca	gatgagacaa	gaatatacaa	agcagcgcca	aaaatgggtg	ccagccttgc	120
tggaagtcta	gctcatgtga	catgcaagga	acctttgcgt	gcttcaatat	caaatcagct	180
aaaaaattcg	cttcaggggc	tgaatctatc	tgctgaactt	ctagaccagg	ctgttcaact	240
ggctaccaat	gataatcttg	accttggtctg	tgcatgcatt	gaacgggctg	cagctgataa	300
ggcaattcaa	accatcgatg	gtgaaatatc	tcaacaactt	aacctaaaga	aacataggga	360

gggtgttgct ccagcatttt ttgaagccac tgtatttgggt caaggttcaa tgggcattct 420
cccagaggct cttcgc 436

<210> 1457
<211> 352
<212> DNA
<213> Eucalyptus grandis

<400> 1457
gcgcggcgga ccggggggga gctggaaatg aagtgcccggt actgctcggc gtcgtcgag 60
gggcgggtgcg ccaccgcccgg cggcgggcgcg tcgatcaccg agtgcacctc ctgcggccgcg 120
gtcgtggagg agcgccacca cttcccctcc ctccccccc aagccctagc cctcgccgac 180
gccgacgccc accccttcga gtccaccggc ttcacaccg ccttctccac ctggtccctc 240
gagcactccc cgctctccct ccgctcctgc ctctcctctc ccggccacct cgccgagctc 300
gagcggaacc tcgagtcac caacccctcc tctcctcct cctcctcgtc ga 352

<210> 1458
<211> 364
<212> DNA
<213> Eucalyptus grandis

<400> 1458
gagaaattta agatcccggg ggagttcaac ggtttgccgg agtttgcccc anatgttact 60
cgtgacatgc ttgatgtcag gccgggggaa gctctcgag tgaacttccc actccagcta 120
caccacacgc cagacgagag tgttgacatc accaatccaa gggatgggct actaaggatg 180
gtgaaatcgc tttctccgaa agtgatcaca ttgatcgagc aggagtcgaa cacgaacact 240
acaccgttcc tgacaagggt tgtggagacc ctgactact acttggcaat gtttgagtcc 300
attgacgtga ccctgcccgag agacaggaag gagaggataa acgtggagca gcactgtttg 360
gcaa 364

<210> 1459
<211> 224
<212> DNA
<213> Eucalyptus grandis

<400> 1459
ctcagaagta cttcatcagg caatctaacg tgtcaaagag aaaacgacgt tccagtctgt 60
ttgatattgt ggagaggaa tcggttgatg tgccaatggg atcaaggagc ttctttgcgg 120
tcgacgagca acagcaggaa acagaagtaa atgatgcctt gcagcagctg ccacctgatg 180
ttgatgaaga atgtgaatct atggactcca ccaactcaaa tact 224

<210> 1460
<211> 363
<212> DNA
<213> Eucalyptus grandis

<400> 1460
gggaaaggcc ctcgaaaatg gggttcgggtc ggcgtcaggc gagctcagga tccgatggcg 60
acccgaggct cggtgggggtg gccgatgatg aaaggaagag gaagaggatg gagtccaaca 120
gggaatccgc caggcgctcc cggatgagga gccagaagca gctgggggat ttggtcggag 180
aagtggggca actgcagcag gctaacgctc agctcgcggt gagtatcaat gctgctgcgc 240
agaagtatgc cgaggtcgag ttggcaaaca atgtcctcag ggcccaggcc atggagctta 300
ccgagaggct ccggtccctg aactcggtag tcgagatcgt gaggtggta gtgggctggt 360
gat 363

<210> 1461
<211> 351
<212> DNA
<213> Eucalyptus grandis

<400> 1461

gtttgccc	aa	ccatgg	tcca	ctcccta	ctt	caggag	aaaa	tatctta	atg	tctgag	cttg	60
cagagt	gctg	caagga	attg	gaaga	agggc	accgtg	cttg	ggctgc	acac	aagaag	gaag	120
cggcat	ggag	gttgaa	acga	ctggag	ttgc	agttgg	agtc	ggaga	aggcg	tgcagg	agga	180
gggagaaa	at	ggaag	agata	gaggcg	aaaa	tcaac	actct	caggg	aagag	cagaa	agctt	240
ctttgg	ataa	gattg	aaaca	gaata	acagag	agcag	ctggc	aggat	tgagg	aaag	atgcag	300
aatcca	agga	gcaga	agctg	gctga	acagt	ggacgg	cga	gcatgt	cagc	t		351

<210> 1462

<211> 209

<212> DNA

<213> Eucalyptus grandis

<400> 1462

gttcaat	cag	ctcgac	ccga	ggatca	acag	gaagcc	cttc	agcgag	gaag	aggaag	agag	60
gctctt	gact	gcacac	aagc	tgtgtg	ggcaa	taa	atggg	cc	atgat	cgtc	ggctct	120
cggccg	gacg	gaca	acg	ccg	taa	aga	acca	ctgg	cac	gtg	atcg	180
agagc	agtcc	aaca	acg	ccc	gcgg	ccg	ga					209

<210> 1463

<211> 423

<212> DNA

<213> Eucalyptus grandis

<400> 1463

ctttgg	cttt	ctccat	ctctct	ctgct	ctctct	tttg	gattc	gtgtg	ttcttt	cttc	60
tttttt	gcac	cacccg	agat	tttccg	aaa	ag	ctga	agtggc	cgggg	agtga	120
agagag	agcc	atcac	caaaa	gcccga	agat	catggg	gaga	ggaaa	gatcg	agatca	180
gatcg	agaac	acgac	gaacc	gtcagg	tcac	cttctg	caag	agaag	gaacg	gactgt	240
gaagg	cctac	gagct	ctccg	tcctct	gtga	tgccga	agtg	gccctc	atcg	tcttct	300
cagagg	acgc	ctctac	gagt	actcca	aaaa	cagcata	aagg	tcaact	atatag	agaggt	360
aaagg	cta	at	agtt	caaaca	caag	cactgt	caca	gagat	caatg	cccagt	420
tca										tatta	423

<210> 1464

<211> 379

<212> DNA

<213> Eucalyptus grandis

<400> 1464

ctcgata	cag	ctctta	agcg	catcagg	acc	agga	aga	aactc	atgca	cgagt	cgatt	60
tctcag	ctgc	aaaaga	agga	aaaat	ctcta	caggag	caga	ataac	gtgct	ctctaaa	aaag	120
atcaa	agaaa	atgaga	aggt	aatgag	agag	agtgg	acaat	gggag	cagca	aacccc	agca	180
ccgacc	acat	cctcct	tcat	gctaca	accc	actttg	ccctc	ttcctt	ccct	caccatt	ggc	240
aacac	gttcc	agacac	cgc	tgtact	ttgga	ggagc	agaac	aagagg	gagag	atctca	agcc	300
cgacc	agcca	acacg	ctcat	gccgc	cttgg	atgata	cgcc	gttcaa	aatga	atagag	agat	360
agagac	caac	aacatt	ctc									379

<210> 1465

<211> 334

<212> DNA

<213> Eucalyptus grandis

<400> 1465

catcac	acag	gttgatt	tga	gaact	gaaat	caagat	cgtc	gtcgt	cgtcg	tcgtt	ctcgt	60
cgg	tgtg	ctg	ct	cgg	ccatt	tgact	cg	gcg	gttgc	gatct	aggg	120
tg	ttg	ggg	ggg	cg	cgagg	gaa	gctcg	agc	ct	gggt	ctt	180
gat	cat	gg	aa	gg	cg	tcg	gcg	gcg	gcg	gcg	gcg	240
cgt	gg	agg	ag	at	ga	aggt	cg	tct	ggg	ccg	gcg	300
cat	gg	ccgc	gc	tc	gt	cg	ccag	cg	at	ccg	gc	334

<210> 1466

<211> 371
 <212> DNA
 <213> Eucalyptus grandis

<400> 1466
 tctctctctt cgaaaaacct ttctctctct ctctctctcc tctgtgattg cagatcaggc 60
 tctcgcgcca ctccattcgc gcattctcga cctcctctct ccacgcggcc actgtcccgt 120
 cgcgcgaatt cgccccgcgc tcgtaggaga ccgcattctc cgccgcgcgc gcgatggcgg 180
 cgctggcccc agctccattc cctacgctag caacgcattt ctttggaagt caggccaggg 240
 gaaggaatca attactccct cgttactggc ccaggataac agatcaagag ctacaacaga 300
 tccctggaga ctcaaactct gtaatcactc cgctgtttga gaaaatgttg agtgctagtg 360
 atgcaggtaa a 371

<210> 1467
 <211> 456
 <212> DNA
 <213> Eucalyptus grandis

<400> 1467
 ggttgccgag ttgtgtggag tgccatttga gttccacgct gccgccatgt gtggaagtca 60
 ggttgaaacga gaggacctca gaggcgcacc tggcgaagct atagccgtga attttccctt 120
 tgttttgcac cacatgccag atgaaagcgt cagtaccgat aatcaccgcg atcggctgct 180
 gcgattgggt aagagctctat ccccaaaggt ggtcaccctc gtggagcaag agtctaaaac 240
 caacacgtcc ccattctata caagggttcat agagactttg gactattata ccgcaatgtt 300
 tgagtcaatt gatgtagcgt gccgacggga tgacaagcaa aggatcagtg cggagcagca 360
 ttgtgtcgcc agggacatag tcaacatgat agcttgtgag gagacggaaa gggttgaaag 420
 gcatgaactt ttggggaaat ggaggtcaag gtttag 456

<210> 1468
 <211> 417
 <212> DNA
 <213> Eucalyptus grandis

<400> 1468
 ggaacatcaa tcgaatccat ggcattcagag ctccctcagcc gctaatacaca ggcagctcaa 60
 cctagagctc gcacttgagc catgtttcacc atcctcgtea tcatcaccag catcactcca 120
 tcctcttgca gttcctgcaa aagacaacaa gctttactca tgcaacttct gccaaaagaa 180
 gttctatagc tcgcaagcac ttgggggtca ccagaatgct cacaagctcg agcgaaccct 240
 agcgaagaag agcaggggact tgtgctctgc cgcaaaacct cctgcggcga cctcgaatgg 300
 tcaccatgta cggccatctt ttcaatctgt ggtttatgag aatcagccac gcttggccag 360
 gcatgttggt gatgatatga ggtatgctgg gactaatccg ctgtatggtt catcttg 417

<210> 1469
 <211> 460
 <212> DNA
 <213> Eucalyptus grandis

<400> 1469
 aggatcgaga acaagataaaa ccggcaagtg acgttcgcga agcgggaagaa cgggctgctc 60
 aagaaggcgt acgagctctc ggtgctctgc gacgcgcagg tcgcgctcat catcttctcc 120
 agccgcggca agctccatga attctgtagc ggcccaagggt atcgcgtatt tgtatgttat 180
 cacttgtttt tctcgttaat gttatgatga gacatcaggg ggagaaaacc agaactgaga 240
 tcacactgtt tcattaaatt ctctcgtcca aattctttcg ggaaaccctc agatcttggt 300
 gatctggatc ttggtgctgc cctaaggaga tggcgattta ttggtttttc ttcttttttg 360
 ggtttcagtt tcttgactct ttttgcgac tttccgttca ccatgaaaaa aagctttcag 420
 ccgcacagtt tcttgcttcc tggggtttct gatcttctct 460

<210> 1470
 <211> 408
 <212> DNA
 <213> Eucalyptus grandis

<400> 1470

gaggaagccg	tgcgcgtcga	gccgagtcag	gaggtcttcg	atcgcttctt	cgccggcttg	60
ctcgttgatt	cccccgaggg	cggaccggcc	gaggcgaccg	acggcgcgag	cgacaaggag	120
tccaattcat	ccgacggcgg	cggcggcggc	ggcggcgaac	gggatgagaa	gctggtcgtc	180
ggagataacg	agctttccga	ggacgctgat	gatgatgata	ccgtctctaa	gaaacagaga	240
aggcagctca	ggaataagga	tgcggcggct	aggtcgaggg	agaggaagag	aagttacgtg	300
aaagagctgg	agatgaagag	caaatatatg	gaaggggaat	gccgcaggct	ggggcggttg	360
ctccagtgtc	ttgtggctga	gaatcaactc	tgcgtctgaa	tttgagaa		408

<210> 1471

<211> 530

<212> DNA

<213> Eucalyptus grandis

<400> 1471

gcagaatctg	tagtatatat	gacgatgaaa	gggaaatcta	tacttgcctt	tactgttaact	60
tgtgtcgtgt	gggaaaggga	ttgggcattg	actattttcca	ttgcatgaac	tgcaatgcct	120
gcatgtcgcg	ctccctttca	gttcacaaat	gcagacagaa	atgcttagaa	gataactgtc	180
ctatttgccg	tgagtacatt	tttacctoga	actctccagt	aaaggccctc	ccctgtggcc	240
acttgatgca	ctcggcatgt	ttccaggagt	atacttgtag	tactataact	tgtccgattt	300
gtagcaagtc	actaggggac	atgcagggtt	attttaaaat	gttggataca	cttttgccg	360
aagagcaaat	gccagatgag	tattctggca	agaccaggt	tattctctgc	aatgactgcg	420
agaagagagg	aagcacatct	tttcattggg	tttatcacia	gtgccgtcat	tgcggttcat	480
ataacacgag	gctgctttga	ttccaacctc	agacgcata	atataactct		530

<210> 1472

<211> 381

<212> DNA

<213> Eucalyptus grandis

<400> 1472

ttgccgcccc	actgaagcac	agctgcgagc	tactgggtga	gaaggacggc	gcgggcagct	60
ccggtataac	caaggcgag	acaccacggc	tcaagttgct	cgaccagagc	ctgaggcagc	120
agagggtttt	ccaccagatg	ggcatgatgg	agcaagaggc	ctggaggccg	cagcggggcc	180
tgcgggagcg	gtcgggtcaac	atactgcgtg	catggctctt	cgagcatttc	ttgcatccgt	240
atccaagtga	cgctgataag	catctgttgg	ctcgacagac	tggctctctc	agaaaccagg	300
tctcgaattg	gttcataaat	gccaggggtc	ggttgtggaa	acccatggtg	gaggagatgt	360
accagcaaga	gtccaaagaa	g				381

<210> 1473

<211> 567

<212> DNA

<213> Eucalyptus grandis

<400> 1473

cacggcaaca	aatggaagac	aagacgctgt	tcttcctcac	tgagggatcc	cttctttata	60
cctgggtttc	ggtagttctt	ccacctctct	aagcaggact	tggcatcacg	gttaagggga	120
gtgttcatgc	gctgagacac	aagggtgccac	tcccttgggc	catactgttt	cacatatgca	180
cgtaacaagg	cgctctcttc	agctctccaa	cgctgtcttt	ccttcattgc	caggtgtaga	240
caccacttcc	cattgcctca	aacttagatc	tttcatagt	tggctacaga	agaagatggg	300
gataatacaa	attagaagta	atttctcaca	tcacaatata	atacacgaca	ttttagctga	360
gttaactggg	ctgagaaaag	aaaagaatcc	caaggaggag	acagggttat	ccaaggaaat	420
gcccggcttn	catggcttct	gcgggtccata	cgggatggcc	atcgacgggtg	gtcatagcgg	480
aaatgctaac	agtttcatgg	agaattgcca	gagattgaac	atgctcgttc	catacgatca	540
gggccatgat	caggagcaga	tcaacgc				567

<210> 1474

<211> 423

<212> DNA

<213> Eucalyptus grandis

<400> 1474
 tccccgtcca ttcacagatc agcggcactt cttgcgacaga caattgcaga ctctctctct 60
 cattcaggcg cctgtcttct caagaatctt gtcaaagaaa ctctcttctt tttctctctt 120
 ctctctctct ctctcgacca tggcccgacc gcagcagcga tatcgcgcg tgcgccagag 180
 gcattggggc tcctgggtct ccgaaattcg ccacccgtta ttgaaaacaa gaatttggct 240
 agggacgttt gaaacggccg aggatgcggc tcgagcctat gacgagggcg caaggctaata 300
 gtgcggggcg agggctcgga ccaacttccc ttacaaccca aacatgtctc agtcttcttc 360
 gtcgaagctc ctctcggcga cattgacagc aaagctccac aggtgctaca tggcctcggt 420
 gca 423

<210> 1475
 <211> 402
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1475
 ccaatcttca ctccccctat cccctctctc tctctctcaa gaactaagag cttactatgg 60
 aaagcgaacg ctacgatgag acgacagaga agcagcgaat caggagaagg ccgcaccaga 120
 agccgtacag gggatatccg atgaggaagt ggggtaagtg ggtggctgag atcagggagc 180
 ccaacaagcg ctccccgtatc tggctcggtc cctacgccac cgccgtggct gccgcccgcn 240
 cctacgacac cgctgtgttc tacctccgtg gcccctctgc ccgcctcaac ttccccgacc 300
 tcactcttga cgagggccag gactcgctgg gtgaggtctc agccgcctcc atccgcaggc 360
 gtgcagctga ggtcggggcc caagtttgat gcttgtccaa gc 402

<210> 1476
 <211> 269
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1476
 gaggagatgg cgagggggaa gatccagatc aagctgatag agaacacgac gaaccggcag 60
 gtgacctact cgaagcgacg gaacgggctn ttcaagaagg cgaacgagct caccgtcctn 120
 tgcgacgcca aggtctccat catcatgatc tccagcaccg gcaagctcca cgagtacatc 180
 aagctcctcc acctcaacga agaagatgta cgatcagtat cagcaggcgc tcgaggttga 240
 tctctggagc tctcactatg agaagatgc 269

<210> 1477
 <211> 297
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1477
 ggcaaccagt gtgagatgct cctgctgtca cactgtcaac cttgcaccag ttacacctgc 60
 ttccaatcaa tatgtcatg taaattgcgg aaactgtcgg acgatgctga tgtatccatc 120
 tggagctcca tctgtgaagt gtgcgatctg tcaatttatt actaacgttg gtgcggggcaa 180
 tccaaggggt tctgttccac cacaagaat cgatggacca ccgtcaggga caacaccgtc 240
 tacttcaacg tcaatgcccc aatctactca aactgtagtg gttgaaaacc ccatgtc 297

<210> 1478
 <211> 408
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 1478
 ggctgtctct acaacttcaa atgcaattat tggcctcaga gacagtagac ttgtcccgca 60
 gcttgttgaa ctctgccatg ggttcatgta catgtggagg tcaatgaatg aataccatga 120
 gattcagaac aacattgtgc agcaagtccg gggccttctg aaccgagcaa acaagggatga 180
 atctacttct gaattgcacg ggcaggcaac tcgtgacctc gaatcagctg tttcttcatg 240
 gcattccagt ttctgccgct taattaagtt ccagtgtgat ttcatccgtt ccccttcacgg 300
 ctggttcaaa ctgactctcc ttctgtttga caatgataac aatgggaccc aggaacactc 360

tgatgcctat gccttctgcg atgagtgga gcttgcacta aacatgtc 408

<210> 1479
<211> 317
<212> DNA
<213> Eucalyptus grandis

<400> 1479
attatatcgt cgtgtctatt tcccgaata tttgcataac tactagctgg gtctgtcgt 60
aagccttaca ataaatctac tattagctga gtattgggtg tcgaataatt tgcacgaagc 120
cacgaactat tggcaatcga tctcatggct tcctcgagcg gaacgtcttc cgggtcaacc 180
ttgatccaga actcgggatc agaggagagt ctgcaggcct tgatggatca gaggaagagg 240
aagaggatga tctccaaccg cgagtcggcg aggcggtcgc ggatgaggaa gcagaggcac 300
ctggacgatc tgatgct 317

<210> 1480
<211> 411
<212> DNA
<213> Eucalyptus grandis

<400> 1480
tgtcattcca ttgaacactt tgccatggaa gtgcaagaag atgatgacca ggtttcacca 60
gaaacgggtga acccaaac accctctatt gaggaagaat ctgctaaaac gaaagcttct 120
ggcatcgatc aagaacaggc cgattcgctg aactcgcagg agaagcccc cctgaagaag 180
ccggacaaga tcataccttg cccgcgatgc aacagcatgg acaccaagtt ctgctactac 240
aacaactaca acgtcaatca gccccggcac ttctgcaagg cctgccaaag atactggacg 300
gccggcggtg ccatgctggaa cgttcccgtg ggagctgggc gccgcaagag caagagctca 360
gcttcgcatt atcgccagat cactctctct gangctcttc aagcaagctc g 411

<210> 1481
<211> 401
<212> DNA
<213> Eucalyptus grandis

<400> 1481
gtccgtggag ccatcgaacg tcccagagcc acgggaaaat tggctgcgcc tgtaaaactcg 60
cccagcatgt cctcatcatt ggacctgaag aattcttgca tggatgcaaa tgccaaccct 120
gtgagcattt tgcaacctgg tgtagtgcc cctgaagcct gggtacagaa tgaaagagaa 180
ctgaaaaggg agaggaggaa acagtgcgaac cgtgaatctg ctagaagatc aagactgagg 240
aagcaggctg agactgaaga acttgccaaa aagggtgatt ctctgagtgc cgagaatagg 300
gctcttaaat ctgaaattag tcaactaacc gagaactcgg ataaattgag gctagaaaat 360
gccacattga tggaaagact ggaaaatgca caggagtggtg a 401

<210> 1482
<211> 438
<212> DNA
<213> Eucalyptus grandis

<400> 1482
gtactgcggg ctacagctgat ggaattgacc gacaggctgc ggtccttgaa ttcagtgctt 60
caggctcgtg aggtgggttag cgggctcgcc atcgatatac ccgagatacc tgatccgctt 120
atgaacccat ggagctgcc ctgcccgatg cagccaatta cggcgtctgc cgacatgttg 180
cagctgtgag catcagattg gaagtgtaaa agttggggct gattcttttg ggtcccctt 240
ctggggggat ggtagatcca tagccatttg ctgcttttgt ttttcttgtc aattccgttc 300
tctttcttga agttggaact ccaatatctg tatgcgtctg tctagatgga ctggcgcttt 360
tatgtctgct tgacattgta cttggctggt cttgcttggt acttatggga tgttcctggt 420
ctaaaaaaaa aaaaaaaaa 438

<210> 1483
<211> 370
<212> DNA

<213> Eucalyptus grandis

<400> 1483

cagtcggggt	tgccgttaga	tgataggccc	gagggagctc	gtcccccttc	tccggaacct	60
atatatgata	atatggggat	taggatcaat	acgagagagt	atcgtgctcg	tgagcgtctg	120
aacaaggaga	gacaggacat	tattacacag	attattaagc	ggaatccagc	gtttaagccc	180
ccggctgatt	ataggcctcc	caagctacag	aagaagctgt	acataccgat	gaaagagtac	240
cccggttaca	attttattgg	acttataata	ggacctaggg	gcaataccca	naaaaggatg	300
gaacgtgaaa	ctggtgcaaa	gatcgtcatt	cgnggaaaag	gttcagtga	agagggtagg	360
ttgcagcaga						370

<210> 1484

<211> 335

<212> DNA

<213> Eucalyptus grandis

<400> 1484

gaggaggaga	gcaggaagaa	gggcggcgcc	ggtagcggcg	agtcacaccca	gggagggaaa	60
ggctcgaggt	cgatcagga	gagaaggaag	gggattgctt	ggaccgagga	agaacacagg	120
tggggtcttc	ttcttgtaaa	tcgggttattt	cttctaggcc	tagataaata	tgggaaaggc	180
gattggcgaa	gtatttccc	gaactttgtc	gncacaagga	cgcctacgca	agttgcgagc	240
catgcacaga	agtattttat	ccgtctgagc	tctgttaaca	aagataggag	gcgatctagc	300
attcatgata	tcactaccgt	aggcagtga	gacct			335

<210> 1485

<211> 371

<212> DNA

<213> Eucalyptus grandis

<400> 1485

gtgggttttgc	cgtcctcggt	gatggtgaaa	tcgagcggag	gcgcggggga	ttctgatcat	60
tcagatcttg	aagcgtccgt	cgtgaaggaa	gctgatagta	gcagagtcgt	tgagccggag	120
aaaaggccgc	gaaagcgagg	taggaaacct	gccaatggcc	gagaggagcc	attgaatcat	180
gttgaggccg	agaggcagag	gagggagaag	cttaaccagc	ggttttacgc	gtcccgggcc	240
gtgggttccta	atgtttccaa	gatggacaaa	gcgtcacttc	ttggcgatgc	gatagcgtac	300
atcaaggagc	tgaactcgaa	gctccagacc	acggaatctg	acaaggagaa	tctgcagaag	360
caaatggaat	c					371

<210> 1486

<211> 373

<212> DNA

<213> Eucalyptus grandis

<400> 1486

accaccacca	gtaccaccac	ctccctctct	ctctctctct	ctctctctcc	ttttccctct	60
gttcgtgttc	ggtacgattg	cgaagcggaa	agcgaatgct	cctctccgga	ttgccatgaa	120
ctccaacgct	tcctccaacc	cccagtcgat	ggccacctcc	acgacgtcgg	cgaccactcc	180
ggcgggcggt	ggcgacggcg	gcaagaaggt	caggaagccc	tacacgatca	ccaagtccag	240
ggagagctgg	accgaggagg	agcacgacaa	gttcctcgag	gccctccagc	tgtttgaccg	300
cgattggaag	aaaattgagg	attttgtggg	ctcaaagact	gtcattcaga	tccgaagcca	360
tgcccagaaa	tac					373

<210> 1487

<211> 319

<212> DNA

<213> Eucalyptus grandis

<400> 1487

gagatggtag	ttaatcagag	cctcggagag	cagctcgacg	gatgatgatg	atttgtacaa	60
gaaaccaagg	gaagaaacaa	taaaggcgaa	gatcacgagg	gtttattata	ggaccgaagg	120
gccaggcact	agccttattg	tgaaagatgg	acaccagtgg	aggaagtatg	gacaaaagat	180

caccagggac	aacccttgtc	ccagagctta	cttcaaatgc	gtcacgctc	caagctgcct	240
tgtcaagaag	aaggtgcaaa	gaagtgtga	agaccaatcg	gtcatagtgtg	cgacttatga	300
aggcgagcac	aaccatcca					319

<210> 1488

<211> 384

<212> DNA

<213> Eucalyptus grandis

<400> 1488

attccattta	gcctctttcc	tectcaatcg	gaagggttct	tcaacccaat	ggacggcaac	60
ctctcattgc	aaatccgata	caatccgaca	tgtctggacg	agatgaatgc	ttcggtttcg	120
agccaaaatg	ttgccggatt	cattccggga	tggatgcttt	gaacttacta	catcgacttg	180
gagtgtgaat	cgagctggtg	aaatttgtgc	gcgtgtccct	tgtaaaattg	cgatccgcaa	240
gacaataagt	acataatatt	ttggagctgt	gatgacataa	aaagaggaag	gccacccttt	300
cctctctcat	gatcagaact	tttgataatg	tctgtatggc	ccggcagtg	aattggaacg	360
agctcagctt	tgcagttctt	ttcg				384

<210> 1489

<211> 411

<212> DNA

<213> Eucalyptus grandis

<400> 1489

aagagttgcc	gcctccggtg	gatcaactac	ttgcggcccg	acctcaagag	gggcgctttc	60
tccccacaag	aggaggagct	gatcatccac	ttgcattcca	tccttggcaa	caggtggctcg	120
caaatcgcg	ctcggttgcc	gggacggact	gacaacgaaa	taaagaactt	ttggaactca	180
accataaaga	agaggctcaa	gaactcgtca	tcattcttct	gtagacactc	gccaaacacg	240
agcgattcct	ccttgtcatc	agacgttaaa	gatgtcatgg	gaggtctcat	ctcccttcag	300
gaacaaggac	tcattgccact	ttatatggac	tcgttgtcgt	ccgtgcaagc	tttggtctct	360
aaccagggtta	tcgatccatt	actaccctca	ctcaacccaaa	ggcctcgacc	t	411

<210> 1490

<211> 396

<212> DNA

<213> Eucalyptus grandis

<400> 1490

gaaaaatggg	gagagggaag	attgagataa	agaggattga	gaatgcaaat	agcaggcaag	60
ttacattctc	gaaaaggcgt	tctgggttgc	tcaagaaggc	gcaggagctc	tctatcctct	120
gtgatgctga	ggttgctgtc	ataatcttct	cgaatactgg	caagctttac	gagttctcca	180
gttctggaat	gaaacagata	ctatcaagat	acaacagggtg	tcaagattct	ccagagtcca	240
ctggtgtaga	gtacaagcca	gagtctacga	aagaagatga	taagggtggta	gacaccctaa	300
aagatgaaat	cgcagagctg	cagatgagac	aactaaggct	actgggcaag	gacttgaatg	360
gcctgagcat	aaagggaattg	cagcaccttg	aacagc			396

<210> 1491

<211> 188

<212> DNA

<213> Eucalyptus grandis

<400> 1491

tggatgttac	ttattgttca	attggatttg	actccaggta	acccatggac	ggaggaagag	60
catcgaagg	ttttaattgg	tctccagaaa	ttgggtaaaag	gagactggcg	agggatagct	120
cgtgactttg	tgactacaag	gactcctact	caagtggcaa	gccatgccca	gaagtattat	180
atccggca						188

<210> 1492

<211> 461

<212> DNA

<213> Eucalyptus grandis

<400> 1492

caccggaaac	agtccatgtt	cagaattatt	ctccaattca	tcaaattgggc	attgatggat	60
tctttccagc	gcacccctcc	ccacagaatc	cttcgtacca	ttcttactcc	cccaacaata	120
gacccaattt	ccctcctccg	tcccctcaaa	cttcacagtg	ggactatttt	tggaaaccct	180
tttcatccct	ggactactat	ggatacccca	ctcggagtag	tattgatcat	atggctatgg	240
atgatgagac	cagaggattg	aggcagggtc	gagaggaaga	ggggattcca	gacttggaag	300
aagaaactga	gcacgaagaa	tgtgatcacc	actcgtatgt	tgatgaagat	agaggcaaca	360
gagatgctaa	tttccccact	gaggaagttt	tagtggaaga	tggtgatgac	aggaagagga	420
tgaggatgaa	ggaacagaca	cagctgtgaa	tctgaggatg	a		461

<210> 1493

<211> 445

<212> DNA

<213> Eucalyptus grandis

<400> 1493

gtttcgaaga	agggcgagcc	aataagcaat	cggcatcata	tacagaagat	ggtgagcttt	60
ctgaaatgct	tgataaggta	ttgctcggct	gcggtttagg	gggtcaaattg	tcgggggtgca	120
cacccgagaa	catgagccaa	tccaagggcc	cacctggtcc	aaagggtggc	aggggttcgcc	180
gtaagaaggg	aaataagagc	acagcagact	tgaggagtct	tctgattctc	tcgcgccaaag	240
ctgtctctgc	taatgacttc	aggacagctt	atgaactgct	aaagcaaatt	agacaagatt	300
cttctgcctc	tggtgatggc	tctcaaagat	tggcgcatta	ctttgccaat	gggctggaag	360
cacgccttgc	aggcagtgcc	ggtgatagac	aaaccttttt	ctattcttcc	gaattgcaga	420
agaggacagt	agctgataaa	gttga				445

<210> 1494

<211> 419

<212> DNA

<213> Eucalyptus grandis

<400> 1494

cggaaccggt	ggcaattgga	tcgctcttcc	tcgcaaagcc	gggcttaagc	gctgcggcaa	60
gagttgcagg	ctaaggtggc	tgaattacct	gaggccagac	ataaagcatg	gaggtttcac	120
tgaggaggag	gatcacgtca	tctgcaactc	tttctttacc	ataggaagca	gggtggtcgg	180
aattgcttcc	aaattgccag	gaaggacaga	taatgatgtg	aagaactact	ggaacaccaa	240
gctgaagaag	aagctaata	agcaactggc	ttctctgaaa	acagtgcctg	aaagtaactt	300
tgactatcag	gtctgcgcac	agaactcggc	ctcaatcgat	cctgagacca	agaatcggga	360
atatgctgct	aattcaatgg	gattcccca	gcagaacttc	aatccaggaa	taccactt	419

<210> 1495

<211> 388

<212> DNA

<213> Eucalyptus grandis

<400> 1495

ccaatggtga	cagtgttaag	gatgaccttg	atacagatga	atatgaaact	catgccacag	60
ttttggataa	gctattagca	tgggagaaaa	agctctacga	agaagtgaag	caaggtgagc	120
acatgaagct	agagtatcag	aaaaaggtgg	ctttgctaaa	caagcagaag	aaacgtggtg	180
ctagtgggtga	atccctggag	aaaacaaaag	cagctgtaag	tcatttgcac	acgacataca	240
tagttgacat	gcagtcctatg	gattcaactg	cttcagaaat	aaaccacata	agggacaaaac	300
agctgtaccc	aaagcttgcg	caacttgctg	atgggatggc	gaatatgtgg	gaaaaaatgc	360
gcacgcacat	tgataagcag	gagtctat				388

<210> 1496

<211> 417

<212> DNA

<213> Eucalyptus grandis

<400> 1496

ctccctcctc	ctccaaacgt	ttccgtttct	ctccaagctg	aacatggaca	agaagccaga	60
------------	------------	------------	------------	------------	------------	----

cgacgacagt	ggtaagtccc	aagatgtcga	ggtgagaaaa	gggccgtgga	cgatggaaga	120
ggatctcatc	ctcatcaact	acatagcgaa	tcacggcgaa	ggcagttgga	actccctagc	180
caaagctgct	ggtctaaaac	gtaccgggaa	gagttgtcgg	ctccggtggc	tgaactatct	240
gcgacccgac	gtccggagag	gcaacatcac	tactgaggag	cagctcctga	tcatggaact	300
gcatgccaag	tggggaaaca	ggtgagatgc	acataagtca	cacaactttt	cgttacatag	360
gttctacaac	ataataccca	tcgatcatat	tgaacaacag	tccccgtggn	atcacga	417

<210> 1497

<211> 404

<212> DNA

<213> Eucalyptus grandis

<400> 1497

catggacatg	ctgaagagga	caagaagctc	atcaacttca	tcctcaccca	tggccaatgc	60
tgttgccggg	ctgttcccaa	gcttgctgga	ctgctgcggg	gtggaaagag	ttgcaggctg	120
aggtggacca	attacctgag	gccagacttg	aagagaggcc	ttttgtccga	gtatgaagag	180
aaaatggtca	ttgacctcca	tgcgcaactt	ggcaacagat	ggtcgaaaat	agcctctcac	240
ctcccgggaa	gaacagacaa	tgagatcaag	aatcactgga	acactcacat	caagaagaag	300
ctcaagaaga	tgggcattga	tcctctcact	cacaagccat	tagtcaccaa	caacgacaac	360
acaaccgatc	aacaaccccc	ccaagcagcc	cagacccatc	ccca		404

<210> 1498

<211> 340

<212> DNA

<213> Eucalyptus grandis

<400> 1498

gtcagaggca	atcccaatcc	aaggagttac	tacaagtgca	caaagtctgg	atgccctgtg	60
aggaagcatg	tggagagggc	ctctcatgat	ccaaaagctg	ttattactac	ttatgaggga	120
aaacacaatc	atgatgttcc	cactgcaaaa	tctagcagcc	atgacactgc	agctccctcc	180
gctctaagtg	gactgccaag	aacaagatca	gaagggtgaa	cagtgagcct	agatcttggt	240
gtgggaagaa	gtgcggcatc	agaaatggcg	tcagctgaga	agcagcagat	cctccggcca	300
aaccctgtcc	aaagtcgaat	ccactatgcc	agttccgctt			340

<210> 1499

<211> 311

<212> DNA

<213> Eucalyptus grandis

<400> 1499

gagatggcga	ggacaccatg	ctgtgagaag	atggggatga	agaaaggggc	gtggactcca	60
gaggaagacc	agatcctgat	ctccacatc	caccagtttg	gtcactcaaa	ctggcgtgca	120
cttcctagac	aagcaggtct	gttaagatgt	gggaagagtt	gcagactccg	gtggataaac	180
tacttgcgac	ccgacgtgaa	gcgagggaac	ttcaccgacg	acgaaagaga	caccatcatt	240
gaacttcac	aagttcttgg	caacagatgg	tcggccatag	cctcgagatt	gccggggcga	300
acggacaatg	a					311

<210> 1500

<211> 324

<212> DNA

<213> Eucalyptus grandis

<400> 1500

gttgaatggg	gattcaaaca	atggcttcac	aaggcggcgg	cggcagcagc	ggtaatgcca	60
gaggtggcgg	tggcaataat	ggaaaatcca	ctgaagttca	gccattgact	cggcagaatt	120
caatatacag	tctcactctt	gatgaggttc	aaaaccagtt	aggtgattta	gggaagccat	180
tgagcagcat	gaacctggac	gagcttttga	agaatgtctg	gacagctgag	gccggtcagt	240
caatgtttat	ggatgttgag	ggcacggctg	tggctaataca	aaatgctctc	ccccgtcagg	300
gaagcgtttc	attaactggg	gcat				324

<210> 1501

<211> 380
 <212> DNA
 <213> Eucalyptus grandis

<400> 1501
 ctctctccct ctccctctcc ctctccctct ccttctccct ccctctcttc gatgacacgg 60
 ggctagataa gtttaggggt tcttgagttc ttgctctctc tctctctctc cctgtagaga 120
 ttttttattg gagctttttt tttttttttg gttcctgggtg ttcttgctcg tggcatagc 180
 aagaaaagag agatgggggag agggaggggt cagctgaaga ggatcgagaa caagatcagt 240
 aggcaagtga ctttctcgaa gcgacggact gggttgctca agaaagccca cgagatctcc 300
 gttttgtgcg acgcccagct cgctctcatc gtcttctcca ccaaggggaag cttttcgagt 360
 tttcgactga ctcttgcatg 380

<210> 1502
 <211> 347
 <212> DNA
 <213> Eucalyptus grandis

<400> 1502
 gaactacctc tgagagtcga cgactcagag gatatgttgg tatatggcgc tttgtgcat 60
 gcactcagtt ctgggtgggc gacgccttcg gcttcgaatc aagaacttga tttcgaaacg 120
 aggactgttg ataacgacgg catttggtctg gagctgcaga cgagaccgga gatggtgaag 180
 cgcgagatga gacgcgccag caggacgggtg cattacagag gaggtaggag gcggccatgg 240
 ggaaaatatg cagcagagat aagagacccc aagaagaacg gcgcgaggat ttggctcggg 300
 acttacgagc tgcttgagga cgcggcattg gcctatgacc ggccgct 347

<210> 1503
 <211> 312
 <212> DNA
 <213> Eucalyptus grandis

<400> 1503
 ggtttgctca gatgcagcaa gagctgcagg ctccagatgga ctaattacct ccgtcccgg 60
 atcaagcgcg gttagcttcac ggaccaagag gaaaagatga tcgtccacct tcaggctctt 120
 cttggtaata ggnngggcggc catagcttcg taccttctc agaggactga caatgatatc 180
 aagaactact ggaataccca tttgaagaag aagctgaaga agcttcaagg ccaagcaaat 240
 cctgatgatg atgaccataa tcatcaccca caagggttca acgcaacttc aactccaac 300
 cccaagggcc ag 312

<210> 1504
 <211> 468
 <212> DNA
 <213> Eucalyptus grandis

<400> 1504
 agcacggtct catgagcact cgcaattaga aattaatcct ccatcagaag catcaaaaaga 60
 gccactccca gatgaaccat ctcttatgcc aaatgaggat tcacatcagc tctctccatc 120
 agaagctacc acttccatgg ccgaatcctc tgatttcggt agttccagtc acaaatggga 180
 agctcttccc atggttctag agaagccac tgaagatggg tataattgga ggaagtatgg 240
 ccagaagcag gtcaaggggt gtggttttcc caggagctac tataaatgta gccatctcaa 300
 ttgctcagtc aagaaaaagg ttgagcattc tcttgatggg cgtataacgg aaattactta 360
 cagagggcaa caccagcatg aaatgcctca agccaaaagg acttcaaaag atggtaacaa 420
 cttgaacagg agcacaattt ctctggctaa atctcaagct gttcttca 468

<210> 1505
 <211> 415
 <212> DNA
 <213> Eucalyptus grandis

<400> 1505
 caagctacaa tgggtgattca tatcacttga tatttaagaa ttgcaaccac ttctgcaagg 60

atgtttgtta	caagctgaca	gggaaaccga	ttccaaagtg	gggtcaatcga	cttgcgacaa	120
taggttctgc	ctgcgactgc	ttccttctctg	aaacccttaa	gatcactgca	gtacgtcatg	180
aacctaactg	ccaaccatgc	gaaagtgaga	agcggagggtt	aacaaacaac	ttcagttgcc	240
tgtcttctat	atcaatgagg	cagaagcagt	tatctacatc	ctcattattc	cttcgttctc	300
ccctgagagg	ctgtctaccg	ccttggggaac	tcaaaagggtc	taacaatggc	tccttgaagg	360
aaagatgaga	aatgccccag	agtgaaacta	catcacaagc	gatcatggag	cgctg	415

<210> 1506

<211> 512

<212> DNA

<213> Eucalyptus grandis

<400> 1506

ctctattcca	ctcctaattc	atgcttttctg	tgacaataat	tttgtagcat	gctcaaaact	60
ctagagagat	atcagaagtg	caactatgga	gccttgaggc	cgaacgtgtc	cgcgagagaa	120
tccttgaggat	taagctgtca	gcaggaatat	ttgagactta	aggcacgtta	cgaagcccta	180
cagcgaactc	aaaggatttg	aagtttctat	tgtcctttta	attaaatgtc	agcattcgcg	240
ggatgtagtt	attttcctac	atgattgggg	tctatctgtg	tcatcgngaa	ctaggaatct	300
tctgggagaa	gaacttgccc	agttaagcag	caaagaactc	gagtccttgg	aaagacagct	360
agatgggtca	ttgaagcaga	tcagatcacg	aagagtatgt	aaattatatt	cacgaattct	420
atctaagtca	catcctgagt	tattgngaatt	acaagttact	gnngtcaatc	gctgggatta	480
gtggtcatcg	gtctgggctaa	ctttagtagc	ga			512

<210> 1507

<211> 342

<212> DNA

<213> Eucalyptus grandis

<400> 1507

tctagaacaa	gatcaacagg	caagtgcagt	tcgcgaagag	gaggaatggg	ctcctcaaga	60
aagcctacga	gctctccgtg	ctttgcgacg	cggagggtcgc	tctaatacatc	ttctcccata	120
gaggaaagct	gtacgagttc	tgcagcagct	caagcatgct	caaaaccttg	gaaaggatct	180
aaaaatgcaa	ctatggagca	ccggagccta	gcatctctac	ccgggaagca	caactggagc	240
taagcagtca	gcaggaatat	ctgaaactta	aggcacgcta	tgaagcccta	cagcgaacgc	300
aaaggaatct	tcttggggaa	gaattaggcc	ctctgagcag	ca		342

<210> 1508

<211> 413

<212> DNA

<213> Eucalyptus grandis

<400> 1508

atgacctcga	actaaaagtg	cgagaactgg	aaactgtcat	gctaggaccc	agctcagata	60
tgccccacac	ggttgatatac	aacttcttgg	ttggatctgg	ccagatgtct	caggagacgg	120
agacattgat	ggagattatc	tccaggaggg	acctaaggga	gatttctctgt	gcttgtgcta	180
aagcagttga	agacaacgac	accttaaaat	ttgagtgttt	aatatcagag	ttacgcccga	240
tggtgtctgt	ttccgggtgac	ccgatccaac	gattatcagc	atacatgttg	gaagggtca	300
tagcaagatt	ggcaagttcg	ggaagctcta	tttacaagc	tttaaagtgc	aaagagcctg	360
ctggtgcaga	gctgctatcg	aacatgcaca	ttctctatga	tatatgtcct	tat	413

<210> 1509

<211> 296

<212> DNA

<213> Eucalyptus grandis

<400> 1509

attgaatgaa	ccgggcattt	cggtggaagg	aatacaagaa	gcccgcgccc	tgcaaaattc	60
aacagattcg	gagattgtag	gtgatggatt	tcggtggagg	aagtatgggc	aaaaggttgt	120
gaaaggaaac	ccgtatccca	gctactatag	atgcaccagt	gtcaagtga	atgtgcggaa	180
gcacgtcgaa	agagcttcag	aagatccgag	agcctttata	acaacatatg	agggaaaaca	240
taaccatgag	atgccactaa	gaagtaccac	acagcaggct	cagagtccga	tctgca	296

<210> 1510
 <211> 441
 <212> DNA
 <213> Eucalyptus grandis

<400> 1510
 attccttctt ctctctcttc gaaaaccctt tctctctctt cgatctctct ctctttctct 60
 ctcctctgtg attgcagatc aggtctccac gccgttccat tcgctcatct ccgacctctt 120
 ctctccacgc ggccactgtc ccgtcgcgcg aattcacccc gccgtcgtag gagaccgcat 180
 cctacgccgc cgcggcgatg gcggcgccac gaggagatgc caggggaagg aatcaattac 240
 ttctctgtta ctggccaggg ataacagatc aagagctaca acaaattctt ggagactcaa 300
 actctgtaat cactcctctg tttgagaaaa tgttgagtgc tagtgatgca ggtaaaattg 360
 gacgtttagt gctgccaaga aaatgtgccg aggtattttt ccggtatttt ccagcctga 420
 aaggatttgc cgtcaaagtt c 441

<210> 1511
 <211> 315
 <212> DNA
 <213> Eucalyptus grandis

<400> 1511
 tgatgggaaa ctctcatgtt cttccaatct gaagagcttc ttcacaacag ctgcgtcacg 60
 aggtgatttc cagattcaat ggtccgagtt cgccggacgc ggccggcgctg ccggtagcat 120
 ctaaaagcat tgacctgaa agaaatagga ggaagaagct caatgaaagg ctcttcgcac 180
 tcagagccct tgtaccaag ataagcaaga tggataaggc ttcgatagtg aaagatgcta 240
 ttgattacat ccaagacttg cgtgaacaag aaggnaagat ccgagccgag atcgagagc 300
 tcgaatctgt aattc 315

<210> 1512
 <211> 409
 <212> DNA
 <213> Eucalyptus grandis

<400> 1512
 gagagacaga agaattagaa cgacacgaac aggcaagtga cctactcgaa gcggaggaat 60
 ggcattctca agaaagccca cgagctcacc gtcctctgcg acgctagggt ttccatcctc 120
 atgctctccg gcaacaagaa gctccacgag tacatcagcc ccaccaccac gacaaaaagg 180
 atgattgatg attaccagaa ggctcttggg atcgatctgt ggactacaca ctacgataga 240
 atgcaagagg agttgaggaa actgaaggag gtaataaca attttcgaa ggaaataagg 300
 cagatattgg gccacgattt gaacgagctg agctacgcag aactgcacag tctccgagca 360
 gacgatccga gtcttctgtc aattcaagtg cgggaaagaa agtaccatg 409

<210> 1513
 <211> 323
 <212> DNA
 <213> Eucalyptus grandis

<400> 1513
 ggagagagtt gagaggcctg agacatataa gcagtggcaa atccgcaaca cgaggcgagg 60
 ttttaagccc ctccccctgg atcccgtaat tatgaagaag ctgaagtcga aattgaaaga 120
 ggggtacctt gatgatttcg tggttgacaa agatgggtcaa tggatgctcc aaggatggaa 180
 aggtcggatt ctttatgctt cctcctgttg ggaacctgtg tagaatttct ccaagtcttt 240
 atatgcttgt ccttttggtg tgagccgggg atagttttatg acgaccaagg aggaagctgt 300
 tggctgattc gtggcaagta agg 323

<210> 1514
 <211> 285
 <212> DNA
 <213> Eucalyptus grandis

<400> 1514
 gtaatggaan gccacgagga gatnccaggg gaaggaatca attacttcct cgttactggc 60
 ccaggataac agatcaagag ctacaacaaa tctcaggaga ctcgaaactct gtaatcactc 120
 ctctgtttga gaaaatgttg agtgctagtg atgcaggtaa aattggacgt ttagtgctgc 180
 caagaaaatg tgccgagggc tattttccgt ctatttctca gcttgaagga ttgccactca 240
 aagttcagga tgccaaaggc ttcggagtggt atatttcaat ttcgt 285

<210> 1515
 <211> 290
 <212> DNA
 <213> Eucalyptus grandis

<400> 1515
 aaaacactag tggaggccca gaattcggac acgaggttca gttagtgggtg atataagttg 60
 gcaaggcact gacaaacatg gactccctag ggatgccttc ttgcttcccg gaatgtcggc 120
 cccagagagg aaaagagcac gcaacattgg gtccaaaagt aaaaggctgt tgattgacag 180
 tcaagatgct cttgagctga aaatgacatg ggaagaactc caggatttgc ttcggccacc 240
 gagtgttaac ccaagcattg ttacagttga agaccatgag tttgaagagt 290

<210> 1516
 <211> 357
 <212> DNA
 <213> Eucalyptus grandis

<400> 1516
 gttaggttag tgggtgatata agttggcaag gcactganaa acatggactc cctagggatg 60
 ccttcttctg tcccggaaatg tccgccccag agaggaaaag agcacgcaac attgggtcca 120
 aaagtaaaag gctgttgatt gacagtcaag atgctcttga gctgaaaatg acatgggaag 180
 aactccagga tttgcttcgg ccaccgagtg ttaaccacaag cattgttaca gttgaagacc 240
 atgagtttga agagtatgat gaacctccgg tttttggaaa aagcagtatt tttatacttc 300
 gctccactgg gggacaagag caatgggttc aatgtgatag ctgtggtaaa tggagaa 357

<210> 1517
 <211> 416
 <212> DNA
 <213> Eucalyptus grandis

<400> 1517
 caagattctt ctcccctttc gttccttcga gggtcacaaa cttctctctt tctctctctg 60
 tgtgcggtcg gaagagagat cttggaggct gtgaatcttg gtttctttct cttttgggtg 120
 acgggtcaca taacacgaat ctagggttct tgatcttttg tgggtgtctt tcgaattcga 180
 aggaagaaaa gccaaagaaac aagaaaaatg gtgtggagac cacctccgga tcgggctcgg 240
 aatgcgagac gcgtgtgatg ctgaacgtct acgatctcac gccattaac aattacaccc 300
 gctgggttcgg cttcggcatc ttccattcgg gcattgaagt tcatggcaaa gagtatgggt 360
 ttgggtgccc tgacttccct gttagtgggg tttttgaagt ggaaccaaag agctgc 416

<210> 1518
 <211> 218
 <212> DNA
 <213> Eucalyptus grandis

<400> 1518
 attcgaccag tgtcgggtacc aaaaccacca cggctctccc catctcctcc ggccgaaagc 60
 cctctcaatg aagcgggtgg gagtccctcc gaaacccaac aagctttaca ggggagttag 120
 gcagaggcac tgggggaaat ggggtggctga gatcagactt cccaagaaca ggacacgcct 180
 ctggctcggc actttcgaca ccgccgagga ggctgctc 218

<210> 1519
 <211> 337
 <212> DNA
 <213> Eucalyptus grandis

<400> 1519

ctcaaaccag	aagggccttc	ctctgcggnt	tcaagatgta	aagggaaagg	aagtgggtgt	60
ttcagttcag	atTTTTggccc	aataataaca	gcagaatgta	cgtgttggag	ggtgtaactc	120
cttgcataca	atctatgcag	ttacaagctg	gagacactgt	aacttttagc	cgcattggacc	180
ctgaagcgaa	acttataatg	ggtttccgga	aagcatcaac	ctctatgatg	caggacagcc	240
aactagctgc	tgtttctaac	ggtaaccatt	caagtgaagc	tttgatttct	ggtgggtttg	300
aaaatgtacc	tatgataagt	gggtattcga	gtctcct			337

<210> 1520

<211> 439

<212> DNA

<213> Eucalyptus grandis

<400> 1520

gagcgcttgg	cggcctctga	taggagaccg	gccaaactgct	tcgaatgatg	caagtgatgg	60
accggtaaca	ggacttgac	tgtcaaaagt	ccgcacgctc	atcggctctgc	cagaaactca	120
cggagagaga	gagatggcgg	agagagagga	gaaggggaag	tacgacgaga	tgatgatgaa	180
gaaggggagc	gacggaggga	tagcggaggt	gaatcccacg	ccgaagaagg	gggtgacgtc	240
caaggttggtg	gactacattg	agaagctgat	cgtgaagtcc	atgtacgact	cctctctgcc	300
tcaccaatac	ctcgccggca	acttcgctcc	cgtcgccgac	gagaccctc	ccgtcaccga	360
cctccccgctc	gtcggccatc	tccctgattg	cttgaatgga	gaattcgtcc	gggtgggccc	420
caatcccaag	tttgccccg					439

<210> 1521

<211> 448

<212> DNA

<213> Eucalyptus grandis

<400> 1521

attggattct	accggaaatt	tgcgcgccgt	tgggggtttt	ttgatgtcgg	aggatgggggt	60
cgctcgagaa	gtgcatgaat	gtgctgtgcg	aggagaaggg	gtcgaccgag	tggaagagag	120
gttggccct	ccgatctgg	caactcgcca	ccctctgcga	taagtgcggg	tctgcatttg	180
aacaggccac	gttttgcgaa	gttttccact	cgaaggactc	tggaaggagg	gagtgcgctt	240
cctgtggcaa	gcgcctgcat	tgcggtatgca	ttgcttcgag	gatgctgctg	gagctgctcg	300
attgtggcgg	gatcaactgc	gcgacctgtg	cgaaaagtcc	aggacttctg	cctatcgcaa	360
gtgatgagag	gcctagttag	tttggcatga	ttaatgttcg	tactggtgaa	ctgcaatcta	420
gtaccacaga	caaccatttc	gatagcga				448

<210> 1522

<211> 439

<212> DNA

<213> Eucalyptus grandis

<400> 1522

cacaacaccc	ccatatcagt	aaacacttct	cgtgtctcca	gccagcttct	gtctcatata	60
aacactagcc	ccacctcact	cattatccgc	ttcgctccta	ctcaactgct	atcgcgctat	120
cccagcgcag	acgtctctcc	atgaacttct	ccgacaagga	agtgcagctc	gcgtccgacc	180
acccgaagaa	gcccgcggg	agaaagaagt	tccgggagac	ccgccacccc	gtgtaccgcg	240
gggtgcgtct	gcgcgactcg	ggcaagtggg	tctgcgaggt	tcgcgagccc	aaaaagaagt	300
cgaggatctg	gctcggcacc	ttccctactg	tgagatggc	agcgaggggc	catgacgtgg	360
cagcgctcgc	gctgagaggc	cagtctgcct	gcctcaactt	cgcagactct	gcgtggcggc	420
tgcccaagcc	ggcatcgac					439

<210> 1523

<211> 361

<212> DNA

<213> Eucalyptus grandis

<400> 1523

gcctgggtgaa	cgaagttttc	gagagtggcc	aactttccca	tcgcaatagc	catttggccc	60
-------------	------------	------------	------------	------------	------------	----

atgtattctg	cgacgttgcc	tgaaccagta	ggactcagtg	tggtcgaaga	aagcgtgtcc	120
acgagagatt	gctgcagagc	ttccattccc	tgagataaa	catcttcagc	ctgttgtaga	180
gattgctgca	gattacatat	gcccataaac	tgttgatccg	tcaaaggctc	caggtgggtc	240
cctagtatct	tgagaagttc	agatgaacgg	aaaccgcccc	accacatgaa	acacctctcg	300
gcgggcgtct	tccacatgcc	agagagtatg	tggaaacacat	cggccttcgc	acctatgttc	360
t						361

<210> 1524

<211> 422

<212> DNA

<213> Eucalyptus grandis

<400> 1524

ccgactcagc	aaagccaaa	aaagaaacca	gaaacagcag	accagaccat	tccattccat	60
tccatttctg	attctctact	acagactcgc	agagatgggt	aagagagaca	gagaggacgc	120
ggaggctgaa	gccctggcgc	tggccaactg	cttgatgctc	ctcccccgag	tcggcgagtg	180
cgcgactcgc	aaccgcgaat	cgcggtctac	agagcggatg	ttcgcgtaga	agacgtgcaa	240
ccgcgagttc	tcctcattcc	agggcgctcg	agggcataga	accagccaca	agaagcagaa	300
gctgatcccc	ggcggcctct	tccacctcgc	ctgcaccgcg	gattcctcgc	cagccaagcc	360
gaagaggcac	gagtgcctga	tatgcggcct	cgagttcccc	atggggccaag	cccttggcgg	420
tc						422

<210> 1525

<211> 443

<212> DNA

<213> Eucalyptus grandis

<400> 1525

ctcgatgac	gacacttgca	cgctagtctc	ggatggcgtg	ggctggagag	gaggtggcgg	60
cgactccacg	gccttgggct	tggccccgct	gccgccctcg	acgacccca	ttttccctct	120
gtcagaccca	gacccgggca	agcttgctcg	ggaggaccgt	tctactgacg	aggccgcgct	180
tcgtagatcc	ttcaaactag	tcgtccctctg	caactctcct	tgttttgctc	tgtggctcagc	240
ctccatttgt	cgattccctg	cctcgagatc	ttggatcttc	ttcctaagtt	gcttcacata	300
ttctatggta	tcccccaata	tggaggcctt	atccattttg	gtcacgaacg	gcaccagtga	360
cctcagtata	atgaacctct	cgttgagctt	ctcgcgccgg	cggcgctccg	ccaggacatg	420
gttggcgctg	agctcgtcct	gcg				443

<210> 1526

<211> 379

<212> DNA

<213> Eucalyptus grandis

<400> 1526

gtccctccaca	gttgcggcag	attgtaaaag	ttcccacgca	ctcggttgctc	atatgaccca	60
cctgctgaca	gttcctacac	acgacatccc	tgaaccgcc	accgccaccg	ccgccaccgc	120
cgccaccgcc	gctgcgccc	acaccaccac	ctcgctctcc	catgacattg	cctttaggac	180
actgcctagc	cacgtgccc	gatatggttg	acatattgca	gactgggtca	ttcgggcaat	240
cacgtgccag	gtggccagtt	ttcctacagt	tgttgcatgc	cttctcattc	gtacagtcag	300
ctgcaatgtg	cccttgcttg	tagcagttgt	tgcatagcct	caagtcacca	ggaggagcgc	360
tgcattctct	agcaatatg					379

<210> 1527

<211> 419

<212> DNA

<213> Eucalyptus grandis

<400> 1527

gttacattga	ttgacatgtg	aaccgcgtct	ttcttttttt	ttcagtagtg	gcaatccacc	60
aaggcgggcg	aggctagtat	gatgggctgt	tgacttggtg	cgaattggaa	cttcgagttc	120
tcccgggcgc	gggtgcgctt	gtgggtggtg	tcctcctccg	tcggggccgg	caggttcagg	180
tccaaggaga	ggatgttgcg	ggacttctct	gtgggtgatg	ccgcagcagc	cggcggggtg	240

gtggggctcg	tgcgctcgcc	gctggtggcc	gtcggcgggc	gggcggacct	gtgcgcctc	300
atgtggccgc	ccaaggcctg	acccgacgcg	aactcggacc	cacatatgtt	gcactcgtgg	360
atcttgggct	tgctcgcttg	atggagcccc	ttgtggctgg	ccacgtgggc	ggagagggg	419

<210> 1528
 <211> 381
 <212> DNA
 <213> Eucalyptus grandis

<400> 1528						
cttgccctcac	gattgaagaa	gaaaagagca	gcagaagaag	cgtttccggt	gctatgggtca	60
ttattttgag	caatcgacga	acgggcaact	gagcggttca	tcttttcggt	ggccctataa	120
acaactcggg	ctcaacatcc	atagactccg	cgcggttttc	ttcacgaggg	gggtcgtctg	180
agaccggggg	caatcctttg	ccgcattcaa	tctcttgaag	tagctttctc	ttttcttcca	240
gtagtttccg	ctcctctgct	tttagccgct	caatatgctc	cctaattaaa	tggttctttc	300
ttgccctgat	cttggttaga	cttctttcca	actggttttc	tgtttggttg	agctcctcga	360
ccgaacagga	atccagacc	t				381

<210> 1529
 <211> 524
 <212> DNA
 <213> Eucalyptus grandis

<400> 1529						
ctctcagcat	aatctctctc	tctctctctc	tctctctctc	tctcctgcgc	tctgcgcagg	60
agcttattct	tttattcttt	tcttcttctt	cttttctggt	gggtagattt	gtaaattagt	120
agggcgaaat	ccggaccttc	ttcttcttgc	tccctttctt	tctgcagct	cgaatcgat	180
cgtttctgct	gtccgtccat	ccgatcgaca	tgcccgagct	cttccagctc	gacggcgacc	240
gcgctgccga	cgccctcccc	gattcgccgg	ttgtcgatca	ggagaaaatg	ccgatcgcca	300
cgagccatga	ttatgcta	catggggggg	ttgtgcat	atgcttgagg	aagattgtgc	360
tccaagaaac	tgccctcgta	aaagggttgc	agcacgccta	ctgtgtgata	tgcattctcc	420
gctgggcctc	atgtaaggag	agaccaacct	gccctcagtg	taaacatcct	ttcgacttcc	480
tcaacgttca	tcgctcgctc	gatggcagca	tccgtgatac	atgt		524

<210> 1530
 <211> 185
 <212> DNA
 <213> Eucalyptus grandis

<400> 1530						
gaactggctg	tctgggatca	acatagggaa	gcgagtgcac	atgtttatca	aaaggaccca	60
gaggtccaga	tgtagtcta	acagatnggc	tgtcaatact	agcacagggg	atttcaccag	120
acatcggctg	cccattgggt	agaagagggg	ttggatgtcg	agattcatgt	ctagaagaag	180
aagaa						185

<210> 1531
 <211> 385
 <212> DNA
 <213> Eucalyptus grandis

<400> 1531						
tcagctagcc	gctccaccgc	cttcttcacc	cggcagttgt	cctgcgtgca	gcggtagtag	60
cttctgggat	gttgagtgtt	cttgaccacc	ttctgaccgt	acttctctca	tttgtacca	120
tcgtccagga	catccacatc	gctcatgggc	ttgaagcaaa	acctcggctc	cctcaccttc	180
ctcctccctt	ttatcttctt	catcttcaag	gctgaaaccc	ccatgctctg	gtgggtgggtg	240
tgatcacgat	aatgatcgcc	atgatctcca	ccgcgggatg	aggatctcat	gaccaagctg	300
ctctggctac	tcaactcacc	ccatgccccg	agattcgggg	ttgatctttg	caaagacaga	360
agctgggggc	ctcccaagag	ttcag				385

<210> 1532
 <211> 153

<212> DNA
<213> Eucalyptus grandis

<400> 1532
tcggggtcaa tccatctggt gcagaacata aacgcctgct ttgggtcccag gcattttctg 60
cacagggtcca cctaggagga agaagaacat ctactggtaa ccttctccat ttaccacagc 120
tatcacattg aaccattgc tcttggtccc ccc 153

<210> 1533
<211> 417
<212> DNA
<213> Eucalyptus grandis

<400> 1533
cagaaagtga ctgcgccctag tgtaggagta gggagaggct tggatgcaca ttccatttcg 60
cctccttgaa gccctccaac ggcgagata tttccttgct tttttaggca aaatgttgaa 120
aaactggtag taataaaaag aagccctggt tagctataaa gggaagcccc atcctttctc 180
ctccctttct ctttcttaac tgtccccccc tccctctcc tggctctcgc tctctctctc 240
tctctcagtt ctttctcgga cgggtgtctg tgcgtggctt ttgatcggtc atcacctgag 300
gccgcgtctg caagcaagtg aagaaggagg acaaggaata tggcgagaga gaagatcaag 360
atcaagaaga tagacaatgt gacggcgagg cagggtgacgt ttctaagaag gagacga 417

<210> 1534
<211> 574
<212> DNA
<213> Eucalyptus grandis

<400> 1534
gtccttgtga cgacaaagt cgggaaata ctgcgcaat cgcttttccc atattttatct 60
aggcctagaa gaaataacct gtgttcttcc tcgggtccaa caatcccctt ccttctctcc 120
tgatccgacc tcgagccttt cctcctctgg tttgactcgc cgctaccgcc gccgccttc 180
ttcctgctct cctcctcccc taagtactg gcggagccat ccgagcaagc cgaactgtag 240
gacggcagag gcacgcggcc agcctctatc ctattgacat cttccaccag gtctctgtag 300
tggagcttaa tctcctctag ggttttgccg ggcacgtcgg acgctacctt ctcccaccaa 360
tccggggaaa cctcgaagtg ggtagccagg gcattctcga acgccttgtc ctgttcctta 420
ctccacgagg aacaactagg gctcactgct tcctcgacag tcatcaaaagc aaaaccacaa 480
cacccttcca actccgaacg acttcacgcg actcagcagc gcgaccaa at gaaactcgac 540
ggcaaatct acggagctat cgaaccaacc ccaa 574

<210> 1535
<211> 497
<212> DNA
<213> Eucalyptus grandis

<400> 1535
accgacctcc tctctccacg cggccactgt cccgtcgcgc gaattcgccc cgccgtcgta 60
ggagaccgca tctcgcgcg ccgcggcgat ggccccagct tcattccctg cgctagcaac 120
gcatttcaat ggaagtatgc tcaatgatac taactcatct ggtgaaagtc acacacgtaa 180
tggaaggcca cgaggagatg ccaggggag gaatcaatta cttcctcgtt actggcccag 240
gataacagat caagagctac aacaaatctc aggagactcg aactctgtaa tctcctct 300
gtttgagaaa atgttgagtg ctagtgatgc aggtaaaatt ggacgttttag tgctgccaag 360
aaaatgtgcc gaggcctatt ttccgtctat ttctcagctt gaaggattgc cactcaaagt 420
tcangatgcc aaaggctcgg agtggatatt caatttcgat tctggccaat aataatagta 480
gaatgtatgt tctggaa 497

<210> 1536
<211> 454
<212> DNA
<213> Eucalyptus grandis

<400> 1536

gttcttcctc	gtctccatga	cgcctccttc	ggcaacgacg	gcagcttgcc	cggccaggcc	60
ctgtacgggt	cgaccccgct	ttgggtgtcg	ggcggggacc	gcctcgccga	ctgcggtgc	120
gagagggcga	acaggcgcg	atcttcgggc	tcaacaccat	ggtctgcgtc	cccgatgatcg	180
gcggggtcgt	cgaattgggc	tccacggagc	cgatctacca	tagcccagat	ctgctgaaca	240
agggtcaggaa	tttgttcaat	ttcactgggtg	ggatggaatt	agggtttggg	gggaatggta	300
acgatcaggg	cgagagcgat	cctttcttcg	ctctgggtca	atgatccggc	gggcacggtc	360
gagggtcaaag	acagcgccgt	cgcggggcgg	ccgcggtcaa	gggttcttcg	aattataacg	420
gtagcaatca	tgggtctaaa	tcgattcaac	tcga			454

<210> 1537

<211> 266

<212> DNA

<213> Pinus radiata

<400> 1537

catcaatggc	atcgcttttg	ttcccgcagg	ctatgctgca	ctgccctgca	caatacacag	60
aagcaatgca	ccaaatctgc	agccacagg	aagggcgga	tcaagaggat	tcgtaggcaa	120
caggaggctg	ccccttcg	gccagaggag	gcaactttga	atcagcaaac	tccaccgtac	180
agaggcgtgc	gtcgtcgcaa	ctgggggaaa	tgggtgtccg	aaattcgaga	accgaaaaag	240
aaaacccgaa	tctggctcgg	ctcctt				266

<210> 1538

<211> 426

<212> DNA

<213> Pinus radiata

<400> 1538

gcatattcta	tatgaagttt	gtccttattt	caaatttggt	tatgtagctg	caaattgggtgc	60
catcgcgga	gcatttaaag	acaaagacag	ggtgcacatt	attgattttc	agatcgctca	120
aggtagccag	tgggtaacat	taattcaagc	atttgacagca	agacaagggtg	gttcgcctca	180
tgttcgcctc	acagggtgtg	atgacccctca	atcagagtat	gctcgagggtc	aaggattaaa	240
tttagttggc	gaaagattat	caaagcttgc	agaaagctac	caagttcctt	tcgaatttca	300
tggtttgtct	gtttttgggt	ctgacgttca	tgctgagatg	cttaagattc	ggcctgggga	360
agctttggct	gtaaattttc	ctttgcagct	ccatcatatg	cctgatgaga	gtgtgaatac	420
aagtaa						426

<210> 1539

<211> 447

<212> DNA

<213> Pinus radiata

<400> 1539

cgacggcgtg	gtttttacac	agtcttcgga	ctcttcttgc	tcggagtctt	cccaaccacg	60
gccggcaaa	aaatacaaaa	aaacccatag	caagaaagcc	caagacggct	ctcagccacg	120
aagggtgcag	cattgtcttg	tacagaagac	tcctcagtg	agagccggac	ccttgggacc	180
gaagacgctc	tgtaatgctt	gtgggtgttag	gttcaaatcc	ggcagactcg	taccagagta	240
ccgcccggca	ataagcccca	ctttttttga	gcgagggttca	ctccaatagc	cacagaaaaa	300
tcctcgaaat	gagacgcaa	aaagaagaag	aacaacagag	gccagagcta	acgtcccaga	360
cgtgttcaag	cggcgccaac	gagtcatttt	cagacaattc	tttaccgtct	gaagagtccc	420
ttctagttta	accacaggc	gtgaaat				447

<210> 1540

<211> 382

<212> DNA

<213> Pinus radiata

<400> 1540

gaggaaatgg	gtgtcggaag	ttcgaattcc	caattccagt	ggcagaattt	ggttgggctc	60
ctacgacacc	ccggaaaaag	ctgcccgtgc	atatgacttt	gccgtgtatt	gcctcagagg	120
gtccaaggcc	aagttcaatt	ttccccactc	tccgcccga	ttttcctgcg	cttcatttct	180
atcaccgcag	caaattcaaa	ccgcccggc	caagttcgcc	gcagaagaat	tccggcttct	240

ttccgaaaat	ggcgcgccat	cctcatcata	tggtttggaa	aaggntatg	acattaatag	300
cgaacagatt	acttggagc	agggtgcgac	atttggggat	tcagtagcat	ttgaaagtat	360
ggagaatggc	ggatctttca	ac				382

<210> 1541
 <211> 368
 <212> DNA
 <213> Pinus radiata

<400> 1541						
ggtgattgga	gagggaaatag	cacggaattt	tgtcataaca	cgaacaccta	caccaggtag	60
ccagccatgc	cccagaaata	ttttattcga	cagagcaata	tgactagaaa	gaagagacgt	120
tccagtctgt	ttgacatgac	gccggtgagt	tttttcttcc	tgtcttaaat	tcttggtgtg	180
gtgggcatgg	aagggattca	ggaggcgtct	tgggcaaaga	tcccaaaaat	tggatttgca	240
atcaatcatg	attcataatt	gttctgaaaa	ttatgctaag	aactaatctc	atctttcaaa	300
cctcaaatgg	tattcttttg	tttgaagttg	nttctaagtt	tctttaatgt	ctattcataa	360
tttcattt						368

<210> 1542
 <211> 370
 <212> DNA
 <213> Pinus radiata

<400> 1542						
caagcctaga	gtatgatttg	gcttaccagg	ccttctatca	gcttcttctt	tatcacaaat	60
tcttgcactt	cacaagcaac	caggcaatac	aagaagcggg	ggacaatgct	tctaataattc	120
atatcattga	cctcgagatc	agacaaggcc	ttcagtggcc	cagcttcata	caatcgctag	180
cccacaggcc	tggaggacct	ccgaagctgc	tcaagatcac	agcgatagga	caagacgaga	240
agaggctcaa	acagacaggt	aggcgtttgc	ttgagtttgc	agaatcaatg	gagattgcat	300
ttgcttttca	cccggttggt	gtggacttgg	agaacctgga	tgaatcggcc	ctcaatataa	360
aagcccacga						370

<210> 1543
 <211> 404
 <212> DNA
 <213> Pinus radiata

<400> 1543						
gcggagtatg	ttcaaagcgg	gtgggtgattt	agccgagggc	gaagaggagg	acgaagaagg	60
gcttcgtaac	aaacgtggcg	attgatccta	ccttagcctg	aaaatgctgt	caggaggcta	120
cgcaaccaga	ttcgacacta	ctactgtcaa	caacggatcc	gctaattggc	caatagggaag	180
tgctccccc	agaatttaact	cgatacaaaa	taataatcca	ggagctgtca	ggcctggctg	240
gggaaccatg	ccccttcaca	tgaatcctta	tcattcccaa	tcaatgcctc	ttccgcccc	300
caatgggtatg	cagggctcagc	ttgtgtgcag	tggatgtaga	actcttcttg	tttatccgca	360
aggtgcacca	aatgtttgct	gtgcagtatg	caacacagtc	actc		404

<210> 1544
 <211> 339
 <212> DNA
 <213> Pinus radiata

<400> 1544						
tatgtctctg	catttcagcc	agtccatggt	ttcaagttag	ttagtccaat	aaagcagaga	60
tgggtcgtgc	tccatgctgc	acaaaagttg	gtctcaacaa	gggagcatgg	tctgccgaag	120
aggatagtct	tctgggaaga	tatattcaaa	ctcatggtga	aggcaattgg	aggtctctgc	180
ccaagaaagc	agggctgcga	agatgtggaa	agagctgcag	attgcgttgg	ctaaactatc	240
ttcggccatg	tatcaagcgg	ggaaatatta	caacagatga	agaagaactt	attatcagaa	300
tgcattgctct	cttgggcaac	cgatggtcga	taatagcag			339

<210> 1545
 <211> 395

<212> DNA

<213> Pinus radiata

<400> 1545

ccggtccggg	cgggtggagag	catcagcctt	ggagttacag	accaggaaaa	tacaagatgg	60
gtagatctcc	ttgctgctcc	aaagaggggc	tcaaccgcgg	ggcctggacc	aaaagggagg	120
atatgattct	ctccgaatac	gttcgaattc	atggcgatgg	tggatggaga	aatcttccgg	180
aaaaagcagg	tcttaagaga	tgtggaaaga	gttgcagact	acgctgggtg	aactatcttc	240
gtcccgatat	taaacgcgga	aacatttgcc	cgcgcgagga	ggagcttatt	attcggctgc	300
atgcgcttct	tggcaatcgg	tggtcactga	tagcaggacg	actgcctggg	cgaacagaca	360
acgaaatcaa	gaactactgg	aacactcatc	tgagc			395

<210> 1546

<211> 390

<212> DNA

<213> Pinus radiata

<400> 1546

gttctgtcaa	gaccagcaa	gaattttggt	ccgggtttga	aggtgggaga	agtgaggtga	60
ttcctccttt	ggaagatgtg	gaaggggtcca	caccacgat	tggggggagg	aagagaaaaa	120
atgtttacag	aggtatcaga	cagcgcccat	ggggaaaatg	ggctgcggag	attcgagatc	180
ccagtaaggg	ggttaggggt	tggcttgga	cgttcaacac	ggcagaggag	gccgccaaag	240
cctatgatgc	agcggctaaa	aggatccgag	gtaagaaagc	taagctaaat	tttgctgata	300
actcgtgttc	tgttaaaaat	gacactagca	agaaattgtc	aggaaaagaa	aggaaagtgtg	360
tgctcaaaac	accctgcttt	tggtgttaga				390

<210> 1547

<211> 447

<212> DNA

<213> Pinus radiata

<400> 1547

agggtccccg	cgaaatgact	gaagaggagc	gggagacgaa	gaaggccgcc	agtgtggccg	60
ccacggctgc	cgaccaggag	ctcaggaaga	aagtgtctgc	ggatctgcac	gcgctgatta	120
atcccaacgc	gactggagag	gcggatccgg	cggagtctcc	aggggatgat	gctactgtag	180
atggggaaagt	cacggacgcc	gagtgggtttt	acttgggtgc	catgatgaag	tcatttggaa	240
atggcttggg	ggtgccggga	caggcatttt	gcggtggcat	gcctatttgg	atcattgggt	300
cagaaaagct	tcagagctac	aactgtgagc	gggctcgtca	ggctcagcaa	ttcggcattc	360
aaaccatggg	atgtattcca	acacctaatt	gagttgttga	ggtgggttcc	acggatttaa	420
atccgcagaa	ctgggatttg	atacaga				447

<210> 1548

<211> 357

<212> DNA

<213> Pinus radiata

<400> 1548

cagaaatctt	gtgatccttg	tgattataat	caaaggctcag	ccttgcaagc	aaccgtgaag	60
ctgtgttcag	ttcagagctt	ctcttgcccc	atggattcgg	agcttatgat	ggatgccatg	120
cggaaccttt	cgaataatgg	attcgctact	tcttccatgg	aaatgttagc	ggttatgccg	180
gatcagatta	ctgtcgaagc	accaccggat	tcgtcgacgt	tgctcgcggc	accacgcaat	240
ggccgattgg	caggggagcg	gcgggcaagg	ccgcacccga	gtcaagtgtc	caaatgcctt	300
cgctgcgatt	cgctaaacac	aaagttctgc	tactacaaca	actacaatct	ctcgcag	357

<210> 1549

<211> 395

<212> DNA

<213> Pinus radiata

<400> 1549

gagcactcaa	aatgggggaag	acgaagatgg	agattaaacg	cattcaaaac	cctagccgcc	60
------------	-------------	------------	------------	------------	------------	----

gccaggttac	tttctcgaaa	cgcaagaacg	gattgctaaa	aaaggcattc	gagctttctg	120
ttctctgcga	tgctgaagtc	gccctgatca	tttctcgga	aactggcaag	atctgcgagt	180
ttgcaagcca	cgacgacatg	gcaacaatac	tggaataata	togaatatac	acggaaacag	240
atggaaacat	ggagtcgtcg	tcgggtccaaa	gcgtgaagggt	ttgactagaa	tgagaatttg	300
aagtttaacc	cctgcaaata	ttatattgaa	gggaaatcat	ggtccaaaat	caagtcgcca	360
cccaagttaa	agtgcaatgt	aatcacttta	gcttg			395

<210> 1550
 <211> 634
 <212> DNA
 <213> Pinus radiata

<400> 1550						
gtccgctcga	ggtacgcaaa	gcacctacgc	agcggcattc	gaactctcta	cccatacgtc	60
agatttcaca	gtgacccttg	aatacaggta	agcgttaagg	tgaattttga	caatggagga	120
tcacggaggg	gacgacgcat	tcagagtgat	gtagtaggga	gacgcacatt	tcgtcgcagc	180
gagccttata	gactataccc	taatgatagg	aatggatatg	gtcccagggtc	ttccaggcct	240
attgagcttt	gtaacaactg	caagcgaaca	gggcactatg	cacgagagtg	tccaaatgct	300
tctgtatgca	acaactgtgg	agtttcaggg	cacattgcat	cgaagtgtcc	aaaagagcaa	360
ttatgcagga	attgcaagaa	gcctgggtcat	cttgcagctg	attgccgcaa	tgagcctgtc	420
tgtaacatgt	gtggtaaaac	agggtcacatg	gcaaagggaat	gttctgctca	tgagctagga	480
cttccaaaat	cagcactctg	caagaagtgc	tatttgacctg	ggcatattat	ggcagactgt	540
cctaattgata	aggcctgcaa	taattgtcgc	cagactggcc	acttggtctg	agattgtatg	600
aatagcccgg	tttgcaatgg	ctgtggtgaa	cctg			634

<210> 1551
 <211> 612
 <212> DNA
 <213> Pinus radiata

<400> 1551						
agaacatggc	caagcacact	gtctgcgcct	cttttctcaa	cgaaggagac	ttcatttgcc	60
ctccttacga	agatggaatt	ggctctagaat	ggctgtcgga	cttcgtggag	gattcctttg	120
cagctacagg	aagttcgaat	tctgggttcc	tggtgactt	gtctaaggac	aaaatcgacg	180
acaacaggga	gaagaagaag	cagaacccaa	ccgatgaagc	gataatccct	gaaataccgc	240
ctataaagga	gactcccagg	tcacagaggg	cgggtgccgg	gcgggctcgc	agcaagcggc	300
gcagaagctc	aggagcccca	attcgcggtt	gggtctacttc	tgaagattac	gcattgcaga	360
atgagggcgg	catgaaaact	gtaacaggag	cggacgctat	aaatcattac	cagtcctcgg	420
cgccccagca	gcagccaagg	cgctgcactc	attgtctcag	ccagcgaacc	ccgcagtggc	480
gattggggcc	gttgggtccc	aagaccctgt	gcaatgacctg	cgggtgtgagg	ttcaagtctg	540
gcaggctctt	ccccgaatac	aggcctgcca	agagccccac	tttcattcga	tacattcatt	600
caaattccca	ta					612

<210> 1552
 <211> 562
 <212> DNA
 <213> Pinus radiata

<400> 1552						
gtcatccata	ttttcttttt	cagtctgcaa	tacaaattgt	tattcgagat	acgattgatc	60
atgcttgaag	gctatgccta	tgcttgcgga	aacataccgt	gacagctttg	agacgacttc	120
gggaggttagc	agcgtggatc	tggtaggaat	ggctctacca	ggtttggtccc	ctaatttgctc	180
ttctgcttca	gtttcagctt	cagcgtcgga	agattctgcc	aagaaaataa	ggaaacccta	240
taccatcacc	aagtccagag	agagctggtc	tgagcaagag	cacgataaat	ttctcgaagc	300
ccttcaacta	tttgatcgtg	attggaaaaa	gattgaagct	tttgtaggat	caaagactgt	360
catacagatt	cggagtcatg	cacaaaagta	cttcttgaag	gtccaaaaga	atggcacaag	420
agaacatgta	ccacctcctc	gtccaaaacg	caaagcatct	catccatacc	cacagaaggc	480
ctcaaaaaat	gttctctgtg	cacagcaagt	atcaactgct	tttccaaactg	ctgctactca	540
actagattct	ggatattatc	ca				562

<210> 1553

<211> 392
 <212> DNA
 <213> Pinus radiata

<400> 1553
 caacaatggt ccatattgag acctactttt gtccgcattg cctccactcc agaacgttgt 60
 attttcttta atgcattgcg cctcaatatc ttctcttttg attgcacagt cgccaaaccc 120
 atgcttctat accttgagac taatgcacga gaaagagcaa catctctctc aaccgttggg 180
 cgtggcctct gacggtaata acgaagaaat tcacgagAAC caagcatctt gcatgttgtt 240
 ccattttcag actttctttg gattaccagt tcagccctc caaagccaag ttcaatattg 300
 acattgagat tttcttctgt gggcactatt tgcacccac tttcatcctg gtaactgctg 360
 ctgtagtcat aaaagtcggc taaatcacta tc 392

<210> 1554
 <211> 570
 <212> DNA
 <213> Pinus radiata

<400> 1554
 tcgtttctcaa gcaccaggga gagcatggaa aggcgagatc agagtccggt tgcagctcgc 60
 caccatcatga gaaaacacta cagaggagtt cggcagaggc aatggggcaa atgggtagcc 120
 gagattcgcc tccctcagaa tcgaaccggt ctctggctcg gcacctttga caccgcagaa 180
 gcagcagctc tagcatatga ccgagctgct tacagatggc ggggtgagtg cgctcggctt 240
 aatttcccc atttgttctc aaaaaagtat cagaattcct ctcccagctc caccaatggc 300
 aggattcctc gcctttcttg tgaataatct gatcagaaat atgcatataa tggtgaccca 360
 gttcatacga atgtatataa gggccccca attcggataa ctgcatacaa cggcgaccca 420
 gttcctatag atgtatatag gaggaccca gttcgggtaa gtgcatatac tggtgaccca 480
 gttcggataa gtgcttatag tggtgatcca gttggcaata ccgttacttt agcggaatcc 540
 gagcttgaaa gctcctgcag ccatgaatcc 570

<210> 1555
 <211> 392
 <212> DNA
 <213> Pinus radiata

<400> 1555
 ctttagcgacg gttcccaatc cctagtcctt gcactttact cgtctctctg tgaagatgag 60
 gagattgctc tgtgagaagg gtaatacaaa caaaggggagc tggacccaac aagaagatgc 120
 ccgactcatc gcctacattc gagcccacgg cgaaggcggtc tggcattccc ttcccagggtc 180
 cgcaggtctg ctgcatgtg ggaagagttg caggctgcga tggataaatt acctgcgtcc 240
 taatctgaag cgtggaaact tctctgaaga agaggacgat ctcataatca aactccacaa 300
 cctcttgggc gataagtggt ctcttatcgc ggtcgattg ccgggcccga tggaaagacca 360
 gataaagaac tattgggata ccacttttaa ga 392

<210> 1556
 <211> 364
 <212> DNA
 <213> Pinus radiata

<400> 1556
 ccttaccgag gggaagcaac gaggtgtttc tcttttccca caagaagata tcaagcaaat 60
 agttacacac caagaaaatc cacaatgggt agatctcctt gctgcgcaaa ggaagggctc 120
 aaccgcgggg cctggacgaa aacggaggat attattctct ccgaatacat tcgaattcat 180
 ggcgatgggt ggtggagaag tctccccaaa aaagcagggc ttaagcgggt tggaaagagt 240
 tgtagattac gttgggttaa ctatcttctg ccgcacatta aacgcggaga catttcccca 300
 gctgaggagg agctgattat tcggctgcac cgccttcttg gtaatcgggt gtcgctgata 360
 gcag 364

<210> 1557
 <211> 355
 <212> DNA

<213> Pinus radiata

<400> 1557

ggagcaccca	aaatggggaa	gacgaagatg	gagatgaaac	acattcaaaa	ccctagccgc	60
cgccaagtta	ctttctcgaa	acgcaagaac	ggattgctaa	aaaaggcatt	cgagctttct	120
gttctctgcg	atgctgaagt	cgcccttatt	attttctcgg	aaactggcaa	gatcagcgag	180
tttgcaagcc	acaacgacat	ggcaacaata	ctggaaaaat	atcgcatata	cacgcaaaca	240
gaaacagatg	gaaacatggg	ggcttcgctg	gtccaaagcg	tgaagggttg	tgaatcacia	300
ttgaaagcgt	tgcacgagag	gatggacaat	ttgaaaaaaa	aggaacgaaa	catgg	355

<210> 1558

<211> 478

<212> DNA

<213> Pinus radiata

<400> 1558

aaaaagctgt	aaaacggtat	atatagagcg	ctctccagtc	taacatcttg	gattgattgt	60
tttctgttag	aaattcccat	catccctctg	tgtcttcctc	cttttgaatc	cagagactgt	120
ttttatgggt	gctgtaaatg	ctgaaataat	gcccaaattc	gaaggggaagt	ctgcgaaatc	180
cctggattca	acattcaagc	tgttcggcag	aacgattgct	gtgaaaaatc	cctgtgatag	240
cagcagcaat	ggtattcatg	tcatgggat	tccagctgaa	gcagtgaatt	cagcagtcct	300
caaggcttct	gaaacgcatc	atcatgatga	gaaacagaag	cagaatgagg	attcagaaaa	360
ggtgggtaaa	aagcccacaa	agcttgtgct	ctgcctcgc	tgcgagagca	tggtatacaa	420
attttgctat	ttcaataact	ataatgtcaa	ccagcctcgg	cattattgca	ggagatgc	478

<210> 1559

<211> 389

<212> DNA

<213> Pinus radiata

<400> 1559

agaagggttg	aatggcttag	tccgctcatt	tgatggcgaa	cagatctttg	tgaggaggtt	60
cagactttga	ttatgagaac	gaagccgata	cgaggaagg	tccatggact	gtggaagagg	120
acatgcagct	tggtattgta	aatttgcacg	gagaaggacg	ctggaacttt	ctcgccagag	180
catctggcct	ccagagaact	ggtaagagct	gccggctaag	gtgggttaac	tatctccggc	240
ctgatctcaa	gcggagcaag	atcactcctg	aagaagaacg	tttgattatt	gaactccatc	300
gccgttggg	aaataggtgg	tctcgtattg	cacaaagttt	accgggaagg	acggacaatg	360
aaatcaagaa	tttctggaga	actcgtatg				389

<210> 1560

<211> 354

<212> DNA

<213> Pinus radiata

<400> 1560

agatgcctcg	ggtagcagtt	tacaagagcc	tgaggagaat	gatgaagaac	ttgctcaagc	60
tcttgaagca	agtttgaaaa	tgggttcaca	gcaaaatcct	cccagtcagc	ctccatcata	120
ctcttaccct	agaggataca	ggatctgtgc	tggttgcaat	catgagatag	gctatgggcg	180
gtttttaagt	tgtatgggga	ccttatggca	tccagattgt	ttttgttggt	ttgcatgtag	240
tctaccata	cgtgaacacg	agttttccat	gtcagggaat	gatccatacc	acaaatcctg	300
ttacaaggaa	ctccaccatc	caaaatgtga	cgtttgccac	cagtttatcc	ctac	354

<210> 1561

<211> 248

<212> DNA

<213> Pinus radiata

<400> 1561

gccaggtgag	gcattggcag	tcaattttgc	attccagctg	catcacatgc	ctgatgagag	60
tgtctctacc	aggaaccca	gggatcaact	tttgagaatg	gtaaaaggcc	tgagtcctaa	120
agttgtaaca	gttgtggaaa	gggaaatgaa	cactaatact	gtccttttcc	tccctcggtt	180

catggaggca ctgaattact actcagctgt gtttgaatcc ttggatgtta gcctcgaaag 240
ggaaaacc 248

<210> 1562
<211> 346
<212> DNA
<213> Pinus radiata

<400> 1562
tctgtaagtg cttgagggct tcttgtatcg atgaggccat taacgatggg aagatctttt 60
agttgttgga gctgttcaaa agataatggc cagcagcgct ttaatcgtgg atcttgaggat 120
gctgaggagg atacaatttt gagtgaacat atcaaaactc atggagttgg tcgatggaca 180
tctcttccca agaaagcagg tctaaaacga tctgggaaga gttgcagatt acgttggttt 240
aactatcttc gttcagatat caagcatgga aacatttctc cggaagaaga ggaactcctc 300
atcagattac atcgtctcct tggcaatcgt tggtcgttga tagcag 346

<210> 1563
<211> 354
<212> DNA
<213> Pinus radiata

<400> 1563
gtttggggat atatcagaat gcaggacact gctgcttcca catctacaca gcatcagtc 60
acaagtga aaatcttcaag ttcagcagct ccagcccat ttagacaagc caaagatgca 120
attgagagcg atgatgatat caggagggtt cctgaaatgg gaggaatgca agcagggtcca 180
tctacatgtg tgcctatgag gttagacaat ccccaaccta gcacaggcgt tgttgccac 240
aggaagagag ggagagcccc tgcagacaag gaacacaagc gtctcaaaag attgcttagg 300
aacagagtat ctgcccaca ggcaagagaa agaaagaaag cataacttaa tgat 354

<210> 1564
<211> 324
<212> DNA
<213> Pinus radiata

<400> 1564
tagctgccga gtgtacgaat gagaaggcat gcaacaactg tgcgaagacc gggcatcttg 60
ctcgtgactg caccaacaac ccagtttgta atttgtgcaa tatatctggt catgtggcca 120
gggagtgcgc caaggctcgc attttggtat gtaatagggg tggagatttt attgacgata 180
ggcgtggaag atttaattgac ataactctgta ggacatgcaa cgagccaggg cataccagta 240
gggagtgcac tgggaattctc atctgccaca acttgtgggtg gccgtggaca tgttgcatat 300
gaatgcccc tctggctcgtg tgat 324

<210> 1565
<211> 421
<212> DNA
<213> Pinus radiata

<400> 1565
aacggaaaca ggaccggact ctggctgctg cctccctca ttaaccattc ctgtctgccg 60
aactcgaggt ggctgttagt gggaaatgcc atttttatac atgctccaa ggccatcggg 120
agtggagaag agatcactat tccttatttt gatgttctgg ctcccttgtt acggcgccaa 180
gctgactgta agaactggg tttcaagtgc aagtgtgaaga gatgcattct ggagcactca 240
ttcaggaaat tcctagaacc tataattgcc cttaaagtttg agcaattgga tgaccaagca 300
aaagaattgc ttgctggatt ggatcatcgg gaaagtgcag aaatgagtca ccgggaaat 360
gcagaatttg caatgtttgt tccagaggca gaggagatca tccggagttc ccatgtgttg 420
a 421

<210> 1566
<211> 390
<212> DNA
<213> Pinus radiata

<400> 1566
 cttaattccg caacacaatg cgtttttcatt ggagttgaga ttttcagatc ggcaattgcc 60
 aagctcaacg cccccaaatt gtgattcgat gtttccctcc cactacacag cgttggcatt 120
 gcgtcgccaa atgtggagaa accccagaga gtccggacag agccattccc agcctccaga 180
 gaaagataga ggaaaaactt tcggccaatt taaggggaatc cgaatgcaaa aatggggaaa 240
 gtgggtgtcc gaaattcgga tgccgagatc gaaggagagg atctggctag gatcctataa 300
 aactgtcgag caagccgccc gtgcttacga tgccgcactc tattgcctca gaggaccaaa 360
 cgccaaattc aatttcccca attccgtgcc 390

<210> 1567

<211> 353

<212> DNA

<213> Pinus radiata

<400> 1567
 gtctagggga aaagctttga aattatattgg gtttgagttt agaggggtcag aaggtggatc 60
 atttgaaggg actaatgggt ctgatcagcc acaagatggg actaatatat taactgcagg 120
 tgaagcatcc actgagccag tggaggaaga actagtattt gaggccaaaa atggagattc 180
 agggaaatta gaagatgtgg gtagtccagt agaggctgga gaaagtggta gcactagcaa 240
 ttgcctggga tcatctgctc aagaaaatcg gaaatatgaa tgccaataact gttgcagaga 300
 gtttgcaaat tcgcaggctc tcggggggcca tcaaaatgag cacaaaaaag aga 353

<210> 1568

<211> 436

<212> DNA

<213> Pinus radiata

<400> 1568
 agtattgaaa ttccctgtt ttgatctgat agctatggat ctgatggagt cttttgagggc 60
 aaaggggaag ggagagaaga ggagaacggt gaggggaaaa acccagttga agaggattga 120
 gaacgggacc agcaggcagg ttactttttg taagcgcagg aacggtctgc tgaagaaagc 180
 ttacgagctc tcggtgcttt gtgatgccga agtggcactt attgttttct ctccaagagg 240
 gaagcgctat gagttcgcta atcccagcat gcagaaaaatg ttggcacggt acgaaaaattt 300
 ttcagaagga aataaagcaa cgagtacagc aaaagagcaa gatgtccagg gtttaaaacg 360
 acaaattgag aatatggaag aaagggttga aattcttgaa tccatgcata gaaagatggt 420
 gggggatagc tggcat 436

<210> 1569

<211> 349

<212> DNA

<213> Pinus radiata

<400> 1569
 gttcaattttt ttcacttgca gtggaaatag aagcctgcag gtacctctag gctaccggag 60
 ttcaaatccc gcacgatcac actcccttct tttaacattc cgagttcgaa tccccggaaa 120
 cttctcgaca tgggttaagcc ctgcacaaaa cagaatatcc atgtcaatgg caagccggaa 180
 agccgctcac tgatgtcgcg gcaattcaag ggaatccggc taaggaaatg gggaaaaatgg 240
 gtgtccgaaa ttcgaaatgcc caattgcagg gccaaaaattt ggctgggctc ctacgaatcc 300
 ccagagaaaag ctgcccgcgc ctatgacttt gcagcgtatt gtctgagag 349

<210> 1570

<211> 580

<212> DNA

<213> Pinus radiata

<400> 1570
 agagagagaa cgtgggagaa aacctgcaaa tggccgtgaa gaacctctga atcatgttga 60
 ggctgagcgg caaaggcgtg agaaattgaa ccagaaattt tatgagcttc gtgccgtggg 120
 tctaattgta tcgaaaatgg acaaagcttc tctgctcggc gatgctgctg cttatatcaa 180
 agatctcttt tccaaacagc aggatttggg gtccgagagg gttgatatgc aggttcaaat 240

tgacactata	aagaaggaat	tattgatgaa	ttctttgaag	ttggcagcta	aagaagcaaa	300
agatctttca	agcattgacc	ttaaagggtt	tagccagggg	aaattccccg	gcttgaattc	360
agaagttcgc	attggtggcc	gagaggcgat	aataagaatt	cagtgtacta	aacataatca	420
tcctgtttgcg	agactgatga	tagcaactgca	agaacttgat	ttggaagttc	tccatgcaag	480
tatttctact	gtgaaggatt	ccttaattat	ccagacagtc	attgttaaaa	tgaccagagg	540
ttgttacacg	gaagaccaac	ttcacgcctt	gctttgtaag			580

<210> 1571
 <211> 469
 <212> DNA
 <213> Pinus radiata

<400> 1571						
gttgacggag	caggcagagc	gcattggtcg	cgtcaagatt	ggcagcaacg	gtttgttgc	60
gttggcgacg	cggttaaagg	tggcagcatt	tgacctggaa	acacatggga	tttttttcag	120
agtgaagaa	gaagcagatg	atgagattat	cgttgaatct	gtagatgtta	accgggacag	180
ggttttggta	gcgtcaaatg	acggtaaatg	tagggttcgt	cgaatgagga	cactcgaaaa	240
catatgcacc	ttaccgtttg	acggtttagg	cggagcagat	gataacagta	gcggtagtaa	300
taacaataac	aatagtagaa	aaattcttgg	gactttgaat	acatggctgg	catttgtctg	360
cattgacggg	gtggtgcacg	cttgggacgc	tgacagcggc	gcacgactct	accgtttggg	420
agaacaagtc	ggcgatgtgt	tcgatttggt	atcagacaat	gaacacgtg		469

<210> 1572
 <211> 337
 <212> DNA
 <213> Pinus radiata

<400> 1572						
gggaggcaga	gaaggaaacg	aaaaaggagt	gaatttttgt	gggtttgtgt	ttattgggaa	60
gatggggtgt	gtgtcgcca	aggtggagaa	tgaagaatta	gtgaaaagat	gcagggacag	120
gaggaggcta	atgaagcagg	cagtgaattc	caggcacaat	tttgcctgcag	cccacattgc	180
ttatttgagg	gctctgcaaa	acacagggaa	tgctctggta	caatttgccg	agggggaatc	240
cagtgcctatg	aatggcaatg	ctattgaaga	agcggccaca	ccaatgccag	cgacccatt	300
aacagcatct	catcgccatc	ccatgaaatt	ccatcct			337

<210> 1573
 <211> 341
 <212> DNA
 <213> Pinus radiata

<400> 1573						
gttctatact	gtcacgggtg	ttcttttaat	ggctcgttcc	tcctccctca	ccatggagaa	60
gaatatgtac	tgtagtctca	ctattctgga	gtatgacact	gaggaaggga	gtagttaga	120
ttgggaatgc	gacatgtccg	aggaagaaga	agatcttata	atcagaatgt	acaaacttat	180
cggcaacaag	tggtcgctga	ttgccgggcg	cattcctgga	agaaaagcag	aggagattga	240
gaggtagctg	gccatgagaa	cccaacaatt	gtgcggcggc	gatgatgcta	ttttgacgaa	300
gaaacagcag	aaaaccaata	tgatatcgat	taagtaccgc	g		341

<210> 1574
 <211> 479
 <212> DNA
 <213> Pinus radiata

<400> 1574						
catatcattc	atatgaatat	ggatagcagg	caatcagggg	aagaggaaga	ctgcaacgtc	60
actcggccag	gaggaggagg	aggaatatca	ttacatgtta	gcagcgtgga	atattgccag	120
aagagtgcct	gtgttgccca	tgatatctct	tctgatgaac	aagatctgat	aaatagactt	180
cacaatcttc	tgggcgacag	gtgggcactg	attgcggggc	gccttccatg	gagaagaaga	240
gaggagattg	agaattactg	taaaatgaga	tacacagcca	ctacctcttc	ttcacgctct	300
tgaatctccc	tttctctcgc	caggttatgg	agtgtggacc	aactatcgta	atcagatagt	360
ttgggttgat	tcagattgtt	taggtttatc	tccacttgaa	aatatgtgtg	gatatttgtt	420

tgtttgtttt atcaaaacca agtatagaag aaataaaatt tgatcgtttt atcgattta 479

<210> 1575
<211> 402
<212> DNA
<213> Pinus radiata

<400> 1575
attgatggga tcaccccttg gaggaggact tggctctttcc cctagaatgg gtggagggat 60
tgggaatggc ctcaaggagg attgggggtg ggcttggcgg gtctcggagc tactgcgctt 120
accattggag cagcatctcc cgccaaccag ctttcttctg atggatatgg caacagccat 180
ggagacaact caacagtatc gccaatctct tatggggttg acgtaagtgt aagaggcagg 240
aaaagaggtg gaccggtgga gaaagtagtt gaaagaaggc agagacgtat gataaagaat 300
agagaatcgg cagcaaggtc gcgagctaga aaacaggcat ataccggtt aattggaagc 360
ttgaagttag cagacctcaa agaagagaac aagggaattgc ga 402

<210> 1576
<211> 355
<212> DNA
<213> Pinus radiata

<400> 1576
cttcagccgc ttggagtgca cttcccagct gctacatccg ttgtcctcca gcgcactgct 60
gccatcgttg gagaagccgt cgctgctccg cttgcgagcg gcgtctaagc tgctgatttc 120
gtcgtccagg tggacaacga tgcccttttc ggggtcccgg cagcgccctc gtagcgtgga 180
gttcagtggt ttcttgatcg cgttgctcgt gcggccgggg agggctcggg caattgttgc 240
ccatttgttg ccgtgctgcg cgtgggcctg cagaatagca gcctcctcgg acggggtaaa 300
aggctctgtgc tccacctgag ggctcagctg attgcaccac cgtagcctgc acgat 355

<210> 1577
<211> 463
<212> DNA
<213> Pinus radiata

<400> 1577
gtgaaacttg agcaatttaa cttgattctg ttggagactga tgctgatgag aaaattgagg 60
acaagggagg aagcttgaaa atgactcgcc accagaaacg caaaattgat gaaatccacg 120
ttgaagaggg tcagggtcat gaggattttg atcctgctag ccttcgagag catgaggagt 180
ttacgaaagt taagaacata gcaaaggtag agcttgggag gtatgagatt gagacgtggg 240
acttttcacc tttccctcct gaatacagcc attgtgagaa gttattcttt tgcgaatttt 300
gtctcaattt catgaagagg aaagaacagc ttcaaagaca tatgaggaag tgtgatctga 360
agcatccacc tggagatgaa atatatcgca atggaaacct ctccatgttt gaggttgatg 420
gaaagaagaa caagatatat gggcagaacc tctgctatct ggc 463

<210> 1578
<211> 343
<212> DNA
<213> Pinus radiata

<400> 1578
gaaacaccaa gggttgggatn tctagaacga agcatacgac aacagcgcgc atttcaccac 60
ttaggattga tggagcagca cccttggcga ccgcagagag gacttctga acgctctgtn 120
tctgttcttc gtgcatgggt gtttgagcat tttctgcacc cgtatccaac tgatgcagat 180
aagcatatat tggctaagca aactggcctt acaagaagtc aggtatcaaa ttggtttata 240
aatgccaggg ttagactatg gaagcccatg gtggaggaga tgtacatgga agaactcaag 300
gaagaaaaag tggaccaagg tacacacaat tctgaagctg aaa 343

<210> 1579
<211> 530
<212> DNA
<213> Pinus radiata

<400> 1579

cggcaagtgg	ggagtgccgg	acaatttgta	tggagctcag	gaagacagtg	gtggaagtag	60
tgttaaacag	agaacttga	aggatgggga	ccaattcacc	agtagtgatg	aagctgacag	120
tgaggtcaat	gaattcaaca	ttatgaaaag	aagcaattca	ggggttgat	atgaagataa	180
caaaagaagt	ggggggcaag	gtgatggcaa	tcagtacagg	tcacgtcact	ctcggagcat	240
ctccatggat	agcattatga	gtaagatgca	taacttcagt	gaagacttgg	aacaggaacc	300
gtctcaaggt	cggaatgtca	gacactccca	tagcaattcg	atggatggaa	gtacaaattt	360
caatgtggaa	ttcgggaatg	gggaattcag	tgcattctgag	atgaagaaga	tcatggccag	420
tgagaaactg	gcagagcttg	caacgggtgga	tccaaaaacgt	gtcaaaaagg	atattggcta	480
atcgccagtc	ggctgcacgc	tccaaggaaa	gaaagatgcg	ctatatctca		530

<210> 1580

<211> 561

<212> DNA

<213> Pinus radiata

<400> 1580

ctccactaac	tccttcattt	caacactcac	agcatcggat	cgtgcgata	aaacttctat	60
actggttcga	tctctcagcc	caacagccgt	aggccgaccg	ccattatcgt	cctctaagaa	120
agcttgcatc	catggaaaac	ctgacgatct	ctcaggaaaag	tgtaacacta	caggcggacg	180
ctgccactgc	tcttcaaaac	gcaagaagtc	cagagtgaag	agaactatca	gagtacctgc	240
agtcagtgc	aaattggcgg	acattccatc	tgtgaattc	tcattggcgaa	aatatggaca	300
gaagcccatt	aagggtcttc	cacatccaag	aggctattac	aaatgcagca	cagtgaagag	360
ttgccctgca	agaaagcacg	tagaacgcgc	cctggacgat	ccaaacgtat	tgattgtaac	420
atatgagggc	gaacacagcc	attctcattc	tggatctgaa	aacacaggcc	tggtactgga	480
ttcgtgagac	ccacatacag	acaaagacat	tattctagtt	ttatattacg	ctacagaatc	540
cgccattatt	acagcgggat	g				561

<210> 1581

<211> 357

<212> DNA

<213> Pinus radiata

<400> 1581

cccagaacgg	cataagcact	gacaaaggat	tttaagatct	gtgcgatgtg	ggatatggat	60
ttgccttccc	aagggtcaag	tttgagttca	tctggttcag	tttggactat	acaacagaac	120
aaaatttttg	aaaatgctct	agctgatttt	gataaagaca	ccccagataa	atgggagaaa	180
gtggcagcca	ggctgcctgg	aaaaactgct	acggatgtta	gaaagcatta	tgaagatctc	240
gtggaagatg	ttacttgtat	tgaagctgcc	gcgttgccct	acccacgtac	agtaactctt	300
cctgttcaca	tgaatggtta	gaaaaatcag	gcgctatgca	cggattgaag	caacaat	357

<210> 1582

<211> 522

<212> DNA

<213> Pinus radiata

<400> 1582

gcgagctagg	cggtagctaa	gcaggagaga	gatttatattt	cttgtgtttc	agagtttttg	60
cagtgcgtct	aaatggcgg	agaaaccatg	cggatgtcga	gggtgagact	aggaagttgc	120
gaggacgaat	cccgggccgt	caaagaaacc	catttcaggg	gcgtgcgaaa	acggccgtgg	180
gggagattcg	cagcggaaat	cagagatcca	tggagaaga	ctcgagtgtg	gctgggcaca	240
ttcgacactg	ccgaggaagc	cgcccggtg	tacgatactg	ccgccaggag	attgcgcggc	300
cacaaagcta	agaccaattt	ttctgtcacc	gccgactacc	acaataacgc	tggtgcgccc	360
gcactttcct	ggactcaggc	gctgcatect	cagcagccgg	atctgaacgc	cgcggttttt	420
gctttcgtat	caaacaagag	acgtgaagtt	tcctctggaa	gcgaccggct	cgagttcgaa	480
tctcccaaca	attctcttca	cgctgcacct	ctgagcaggc	gg		522

<210> 1583

<211> 530

<212> DNA

<213> Pinus radiata

<400> 1583

ggcaggagtt	cccgcagct	ttaagaaccc	ttccctttgt	gttagacctc	caggttcctc	60
aggtagcgag	tctctacatc	gcgtgacgtt	caagggagac	gggatattca	gagtcggatc	120
gccgcatg	ccgtagacac	catacagatg	gcgagagtgg	gtgtaaaaat	gaagatcgga	180
ggaggcggct	gcgaggaaga	ggcgctcctcg	gctgtgaagg	aaacgcattt	cagaggagtg	240
aggaaaaggc	cgtgggggag	attcgctgcc	gagatcagag	atcccttgaa	gaaaaccaga	300
gtctggctgg	gcacttttga	cactgcagag	gaggccgccc	gagcctacga	taacgctgcc	360
agaaatctcc	gcggggccaa	ggcgaaaact	aattttcttc	tgtctcccca	caatgacatt	420
agcaccaagg	gcagcagcag	cgccgccttg	tcgagcaata	gcaccaccag	cgccgcctct	480
ggtcaaatcc	aaaaccaatg	gcccctgcgg	ccatatttct	attcgaatca		530

<210> 1584

<211> 435

<212> DNA

<213> Pinus radiata

<400> 1584

gcattgctct	gctcgaacac	atagtagtct	gatctctgcg	cttcgagcac	tacgagaatt	60
gcttcacat	taccttcac	atccaccaat	ggcgccgaa	gatttttaatg	acaagaatgc	120
tgtattcaga	aagctccggg	ccaaaccgga	caacaagatg	tgctttgact	gtaatacaag	180
gaatcccaca	tgggcatcgg	tcacttacgg	gattttcatc	tgcttgatt	gttctgcac	240
tcctcgtagt	cttgggtgtc	acattagctt	tgtcagatct	gtaaacctgg	actcatggac	300
tcctgaacag	ttgaagggtc	tgagctttgg	tggcaatggc	cgaggacata	cattctttaa	360
gcagcatggt	tggaatgatg	gaggtaaaat	agaatcgaaa	tacacatcaa	gagcagctga	420
gctatataga	cagct					435

<210> 1585

<211> 362

<212> DNA

<213> Pinus radiata

<400> 1585

gaaagacttg	cagcttacat	ggtggagggt	cttgctgcac	gaatagcatc	ttcaggaaac	60
ggaatataca	aagctttgaa	ttgtaaaagc	ccaccaagca	ctgatacttt	atctgccatg	120
caaataattat	ttgaagtttg	cccatatttc	aaatttggtt	gcatgggtggc	caatgggtgca	180
atttgtgaag	ccttcaagga	tgagcagaag	gttcatatac	tagattttga	aattgggcag	240
ggaagtcagt	acataagcct	cttaaatgtc	cttgcagaaa	ggcctgggtgg	gcctccacat	300
ttgcgcataa	ctgcagtaga	tgattctgaa	gatgtaagat	atatttcttg	gggattggat	360
aa						362

<210> 1586

<211> 362

<212> DNA

<213> Pinus radiata

<400> 1586

caggagccga	aaagacaaac	tacgaacaaa	atccctgtcc	aaataacaag	aaaaatggca	60
gagtcacagg	ggtcgtctac	acattacaaa	ccgtacaggc	agaagcagac	tctctcaggc	120
caccgtggag	cggtctcgtg	cgtgaaattc	tcaaaggacg	ggcgctcctc	gggcagcgct	180
tctctggaca	aaacaatatg	catatggtcg	gcctctgctt	cttcttctac	ctctgcattc	240
aagcgggagc	tccacggcca	cagcgagggc	gtctccgact	tcgcgtggtc	gtccgactcc	300
cgctatatct	gctcggcttc	tgacgacaag	agcctccgca	tctgggacgt	ccacacgggc	360
ga						362

<210> 1587

<211> 389

<212> DNA

<213> Pinus radiata

<400> 1587
 cttcgggtctg cctgggtgcg tttctgaatt tctcgccaag tgagtgagtc gatccagcct 60
 tgtttcagcg aaacctgttg tggttttggg ttttcttggc ttttgccctt tcattctttg 120
 tttccttgga ttcgaaactcg agatctcctg aatattatgg cacaggagag ctggaaccag 180
 gaggagaccg ggtgccaagt cccggaaggg ctcatgctgt gtgccaacaa ctgtggcttc 240
 ttcggaagtc cggccacat gagtctctgc tccaagtgtt accgcgaatt cgtgctgctc 300
 aactccccta aatcgtcctt cgataagccg caacagcagc tgccgatgca ggacgaggta 360
 tctatcccga gacccgacgt tgctgctga 389

<210> 1588
 <211> 416
 <212> DNA
 <213> Pinus radiata

<400> 1588
 cagcaatggc ggcccagact atcatcgctg cctctatggc atctcctcta acattatcaa 60
 atggccacta tccgttttag tccgagttca aggggtccgt ggttcgaatc ccgcagaggg 120
 cattttcctt cgcgcctgca gcccggggcg tgaccgtcgt cgcataggcc aagaaggccg 180
 ttgcccgcgt caaagggaat tcacagggtcg aggggtgtgt cagtctctcg caggaagaca 240
 ggggtccac aacagtgaag gtccgtttga caggactgac tcctgggaag catggctttc 300
 atctacatga gtttggtgac acaaccaatg gctgcatatc aacaggagca cattttaatc 360
 caaaaaaatt gacacatggt gtccttgagg atgatgtacg ccatgcccgt gacctg 416

<210> 1589
 <211> 507
 <212> DNA
 <213> Pinus radiata

<400> 1589
 tgcgagtc aa tgttctaatt atcccatttg tcacacatgc ggcaaactcg gtcacctctc 60
 cagggattgt acggctccag agcttcccc tggagacatt aggttttgca acaattgtta 120
 caaacaagga catatagctg ccgagtgtac gaatgagaag gcatgcaaca actgtcgcaa 180
 gaccgggcat cttgctcgtg actgcaccaa caaccagtt tgtaatttgt gcaatatatc 240
 tggatcatgt gccaggaggt gcccgaaggc tcgcattttg gatggttaata ggggtggaag 300
 atttattgac gataggcgtg gaagatttaa tgacataatc tgtaggacat gcaacgagcc 360
 agggcatacc agtagggagt gcaactggaat tctcatctgc cacaactgtg gtggccgtgg 420
 acatgttgca tacgaatgcc cctctggctg tgtgatgctg cgggacatgc gcaggcattg 480
 atgctgcagt ttctacacca cctgact 507

<210> 1590
 <211> 370
 <212> DNA
 <213> Pinus radiata

<400> 1590
 cgatatttta tgttggtgaa gttggcaaaa ggagcattgg tcttaaaagg tcaaccctgt 60
 aaggctcctga tcaacccttt gacaagataa aaatggacag aaattcagaa ttttatgaag 120
 agacatcgct acagaaaaat caggcatccg gatcaagtga tggaggtagt tttgattgca 180
 atatttgctt agaattagcc caagatcctg tggtgactca atgtgggtcat cttttttgtt 240
 ggccttgccct ataccaatgg ctacagatgc actccatatc aaaagaatgc cctgtttgca 300
 agggcggtgt agttgaagag aaggtaattc ctttatatgg gaggggtaag gtgggttctg 360
 ctgatccaag 370

<210> 1591
 <211> 308
 <212> DNA
 <213> Pinus radiata

<400> 1591
 gttcccagga gaggagagcc tcagctgtct cgatctggcg ttaaggggtt acagaagaag 60
 aatttcgaag atggttagat cttcttgcta ttcaaagcaa ggtcataggc gtgggatttg 120

gacccctatg	gaggatatga	ttctctctga	atacattcga	attcatggca	gtgatggatg	180
gaaaaatatc	gctaaacgag	caggtcttaa	acgatgtgga	aagagttgca	gattacgttg	240
gttgaaactat	cttcgccccg	acattaaaacg	tggtaacatt	tctcctgatg	aggaggacct	300
cattatta						308

<210> 1592
 <211> 361
 <212> DNA
 <213> Pinus radiata

<400> 1592						
ggatattctg	gtgtgcattg	ctattctggc	catgaatddd	ggcagaatgt	gcgattaggg	60
tttgattctg	ggtgttcttt	tcaggtacag	cagagatttg	aaggggattt	gaatttgaat	120
catggaagtt	gagtgtctga	gccctcggtc	ttccgctcag	gggtgtgagg	ttgacatgaa	180
gccaaacgatg	gtggtggaag	atacgcttaa	tcaaggatgc	atgcaatatg	gatgttcaca	240
ctaccgccgg	agatgccaaa	taagggtctc	gtgttgtaat	gaagtctttg	actgtaggca	300
ttgtcataat	gaggccaaaa	attcaatgga	tgtccatcca	cttgacagac	atgatgtacc	360
g						361

<210> 1593
 <211> 378
 <212> DNA
 <213> Pinus radiata

<400> 1593						
accaagctca	tcacatggcg	tccgagaagg	aagctgctct	tgctgccaca	ccaccagaag	60
atgataaacc	tacaatattt	gacaaaatac	tgcagaagga	gattcccagt	acagtggttt	120
acgaggatga	gaagggtactt	gcattcaggg	atatcgcacc	ccaagcacct	actcacatca	180
ttatcatccc	caaagtaagg	gatggcttga	ctggcctatc	tnaggcagaa	gagaggcatg	240
aggatattct	aggtcacctg	ctatacactg	caaaagttat	tgcaaagcag	gaagggtttat	300
ctgatggctt	cagaattgtc	attaacgatg	gtcctactgg	atgccaatct	gtgtaccatt	360
tacatattca	tctactcg					378

<210> 1594
 <211> 333
 <212> DNA
 <213> Pinus radiata

<400> 1594						
gattgacgga	tcgattgcaa	tggcgtttgc	ggaagagtat	tccgatcgcg	atgccgtatt	60
tcgaaaagctg	aaggcgaagt	ctgaaaaaaa	gatttggttt	gattgcaatg	ctaaaagtcc	120
cagttggggcg	tccgtgacat	atggagtatt	catttggtctt	gattgttcag	caatgcatcg	180
gagtccttgg	gttcatgtca	gttttgtgag	gtctacaaat	ctcgatacat	ggaccatgga	240
gcagttgaaa	ttgatgagct	ttggtggtaa	tggccgtgca	caattattct	ttaagcaaca	300
tggttggaact	gaagggtgga	agattgaatc	aaa			333

<210> 1595
 <211> 356
 <212> DNA
 <213> Pinus radiata

<400> 1595						
ccttaacggtt	gtctatgtgt	tgatatatat	cacaagtgcc	gtctatcgcc	tccttcgggtt	60
cctgggggttc	cgagagtttg	tggaacccga	gacctcctgg	ccagatgaaa	tcaacccacg	120
gttgaagccc	gtgacatttt	ccgtatctgc	gcagaggatt	cgtgagcgat	taccagtagt	180
tcggttcggc	gttttagcgg	aggaggccgg	tgatgaggat	gttatgtgcg	ctggttgctt	240
aaataacatg	cagaggcatg	aggagatccg	aaggctaacg	aattgccgtc	acatcttcca	300
cagagactgt	atggacaaat	gggttgatca	tgaccagaac	gcctgtcctc	tctgca	356

<210> 1596
 <211> 378

<212> DNA

<213> Pinus radiata

<400> 1596

gtcaacgaga	attgccacga	tgggttaatg	tggatttagg	tctgggaagc	tttaggataa	60
gttaattgtac	cgaagtgtgg	ttaatttttag	taaagaggat	tgtgttttat	catgcggatc	120
cagtgcgatg	cctgcgagca	ggcagctgct	tcagtgatat	gttgtgcaga	cnaggctgct	180
ttgtgcaggg	agtgtgatat	aaaagtccac	aaggccaaca	agcttgccag	caaacacaag	240
agattgcctc	ttgtcggaac	ttccccaaag	ctctctcgct	gcgacatttg	ccaggatagg	300
gcagccatcg	ttttctgtct	cgaagatcgt	gctatgctgt	gccaaagactg	cgatgagtcc	360
gttcattctc	gcgacaca					378

<210> 1597

<211> 387

<212> DNA

<213> Pinus radiata

<400> 1597

tcgataatag	cagggagagt	ccccggccga	acagacaacg	aaataaagaa	ctactggaac	60
actaacttga	gcaagaaact	tgctgtcagg	ggaatcgatc	ccaagactca	taaaaaaatc	120
acgacggaag	gcacgaacag	agtcaacggg	gatcggtttca	gccagaggaa	aggtgagaaa	180
atatatgatt	ctccacagaa	acctcgacag	ccggaaagaa	atgttgcgag	ggccgcccac	240
tcaacagggc	tcgtgattcc	taatgttcac	aatctaaaag	cggattttaa	agcgcaatat	300
attgcaagaa	tcagagaatt	taaaagctct	aatactatca	gctcctcttc	tcgacttaat	360
gcacagattg	agccaaagtc	cagagag				387

<210> 1598

<211> 276

<212> DNA

<213> Pinus radiata

<400> 1598

ggtttgcag	atttggtgac	gagaatgaga	aaaaccgagc	catgactgaa	atgaatgggtg	60
tttattgctc	ttcaagacct	atgcgaatta	atgaagctac	accaaagaag	tccttgggat	120
ttcaacaacc	ttattccatg	aaaggtaact	attacacaca	ggcatatggg	ggtgcagttg	180
ctagtccagg	cttccagtc	gacaatgatc	caaataatac	aactatattt	gttggtgggt	240
tagatccaaa	tgcgacagat	gaagatctga	ggcagg			276

<210> 1599

<211> 374

<212> DNA

<213> Pinus radiata

<400> 1599

cacatcttga	gcgaataaaa	aatctacgtg	atgggtggagc	tggtgctgaa	gacagcgacn	60
aaaaggatga	agactttgtt	gcagaaaacg	atgatgtctg	atctccaaca	gatgagtcag	120
aagaagaggg	atcagatgca	agtgcagagt	cagaggtcaa	gcaacctgca	aagaaagaag	180
taaagaaaaa	aaaggcgggtg	gctcccaagg	caaccgagac	caagaagaag	aagaaggacg	240
acgaggaaga	gggaggaaaag	aaaaagcagc	ggcgaaagaa	gaaggatcca	aatgcgcca	300
agaaagccat	gactggattt	atgttctttt	ctcaagttga	aagagagaat	ctgaaaaaga	360
gtgacccaag	aatg					374

<210> 1600

<211> 334

<212> DNA

<213> Pinus radiata

<400> 1600

gatctgtgtt	gctgtttgat	tccgcaagct	tggggagatc	aggatctgct	ctttgttgta	60
aatgtcgata	ttacccaaat	cagattccat	tcatattagg	gaagtatggg	ccgataatct	120
ggaagaggag	tttaattctga	tcagggaat	tgttgatgac	taccctctga	tagccatgga	180

cacagagttc	cctggcatag	ttgtgcgacc	cgtgggcaaa	ttcaggaccg	tccaagaata	240
caattatgaa	accctaaggt	caaagttaga	cgtattgaaa	ttaatacaat	tggggctgac	300
gttttctgat	gaaacggcaa	cctcccaaac	tgcg			334

<210> 1601

<211> 401

<212> DNA

<213> Pinus radiata

<400> 1601

gttaggccag	ctcttagttc	gagtcggggc	cgctgctctt	aatcctgccg	actttaagag	60
acggaaaggg	ttattaagaa	acgcggattc	cgattttccg	actgtgccag	gctgtgatat	120
gtcaggagtg	gtgggtgaaa	ttgggtgatg	tgtctccaag	ttcaaggccg	gtgacgagat	180
atacagcaac	atccagaatt	tcgcagcagg	gaggccaaag	cagtgcggga	ctctcgccca	240
gtacacagtg	gtggaggaat	tcctggtagc	gccgaagccc	agtaatttat	catttgagga	300
agccgcgagc	ctgccgcttg	cgcttcagac	tgcgcgagcag	ggcttcgata	caaccaattt	360
tgaaaagggg	cagagcgtgt	tcgttgtggg	aggctcggnc	g		401

<210> 1602

<211> 462

<212> DNA

<213> Pinus radiata

<400> 1602

ggttttgtcag	atttggtgac	gagaatgaga	aaaaccgagc	catgactgaa	atgaatgggtg	60
tttattgtct	ttcaagacct	atgcgaatta	atgaagctac	accaaagaag	tccttgggat	120
ttcaacaacc	ttattccatg	aaaggtaact	attacacaca	ggcatatggg	ggtgcagttg	180
ctagtcaggc	cttccagtca	gacaatgatc	caaataatac	aactatattt	gttgggtgggt	240
tagatccaaa	tgcgacagat	gaagatctga	ggcaggtttt	tgggccatat	ggagagattg	300
tgtatgtgaa	aataccagtg	ggcaaaggat	gtggttttgt	acaattcacc	aacaggctct	360
ctgccgagga	agctttgcaa	agttacacgg	cactgtttatt	ggtcaacaat	ctattcgctt	420
ttcttggggg	cgatctccag	caaacaagca	gactgcaagc	tg		462

<210> 1603

<211> 358

<212> DNA

<213> Pinus radiata

<400> 1603

cagcgaagcc	gattttccaaa	gatggatagg	gagaaactca	tgaagatggc	tggtgcagtc	60
cgactggcg	gaaagggtac	aatgcgaagg	aaaaagaaga	caattcataa	gactgccacg	120
gcagatgaca	agagacttca	aagtaccttg	aaaagaatag	gcgtgaataa	catccctgct	180
attgaagaag	tcaatatttt	taaggatgac	catgtttattc	attttgctaa	cccaaaggctc	240
caggcttcta	ttgctgccaa	cacatgggtg	gttagtgggt	catcgcaaac	aaaaaaactt	300
caagatcttt	tccttggtat	catcaatcag	cttgaccag	agagttttgc	caatctga	358

<210> 1604

<211> 358

<212> DNA

<213> Pinus radiata

<400> 1604

accaagctca	tcacatggcg	tccgagaagg	aagctgctct	tgctgccaca	ccaccagaag	60
atgataaacc	tacaatatatt	gacaaaatac	tgcaagaagg	gattcccagt	acagtggttt	120
acgaggatga	gaaggtaact	gcattcaggg	atatcgacc	ccaagcacct	actcacatca	180
ttatcatccc	caaagtaagg	gatggcttga	ctggcctatc	taaggcagaa	gagaggcatg	240
aggatattct	aggtcacctg	ctatacactg	caaaagttat	tgcaaaagcag	gaagggttat	300
ctgatggctt	cagaattgtc	attaacgatg	gtcctactgg	atgccaatct	gtgtacca	358

<210> 1605

<211> 461

<212> DNA

<213> Pinus radiata

<400> 1605

gcggaacttta	ttgtaaaaga	gccaatgggtg	attgggtcatg	agtctgctgg	aataattgag	60
gaggttggca	gtgaagtga	acatctggtt	cctgggtgacc	gcgtagcttt	ggagcctgga	120
atatcggtgt	ggcggtgtga	ccaatgtaag	cgaggctcct	acaatttgtg	tcccgagatg	180
aagttttttg	caacacctcc	cgtgcatggt	tccttggcca	atcagattgt	tcatcctgca	240
gatttatgtt	tcaagttgcc	agataatgta	agtctcgagg	aaggtgccat	gtgtgaacca	300
ctcagtgttg	gggttcctgc	ttgtcgccgt	gcttctgtag	gtcctgagac	aaatgtcttg	360
gtaatggggc	aggtcctatc	ggccttgta	ccgtgctgtc	tgcacgtgca	tttggagctt	420
cacgaattat	tattgctgat	gtagatgaag	agcgtctgtc	a		461

<210> 1606

<211> 463

<212> DNA

<213> Pinus radiata

<400> 1606

gccactgttt	gtatgtgatc	tccgggcctt	gagcttatac	gtttttcagt	tgcagggttg	60
gagcctgtca	aattatactt	accatgattt	ggaaagaagc	tgcgacagtg	ctacacaagg	120
cccaacatct	ggagaagcca	cccttcatct	ttactgtatt	tatcgcatct	tttataggat	180
tcgccgcctt	ctcgtatctc	atcactaacc	gtagaactag	ggaattacga	ggaatcccgc	240
ccggcacctt	tggtatggcct	ttgatcggcg	agacattaga	atttctggga	tgccagagaa	300
ggggaaggcc	ccaggatttc	tgtgaccgtc	gaacacagaa	gtatggaaac	gtgttcacca	360
cttcccttgt	gggcacccga	cagtgggtatt	atgtagtccc	caaggcaacc	gcttcttgtt	420
cgccaacgag	aacaaactgg	tggtaaattc	atggcccgc	tct		463

<210> 1607

<211> 410

<212> DNA

<213> Pinus radiata

<400> 1607

tcttgaacttt	gctaattgaga	catttcggccc	aagcttagtc	gttggttatcg	ctgccctgtt	60
cctctcaatg	ctatgctttt	tgttgttcaa	tgccctgctc	cgctgcagac	ggctctacag	120
gcgatggcga	gtgggtgtcgg	agccatcacc	caatatggat	gtcgaaagaa	ctgaatctgg	180
catcgagaaa	aaggatttag	aagcactttc	agccacagtt	taccgcaaag	cccacccctt	240
cagagccatg	gattgcccc	tttgcttggc	ggaattcaaa	gaaggagaaa	aggtgagagt	300
attaccagaa	tgctgtcact	gtttccatgc	agattgcata	gacgcatggc	tgctttccaa	360
tgcttcttgt	ccttcatgtc	gacacactgt	cctttgcgca	ttgccgaaga		410

<210> 1608

<211> 357

<212> DNA

<213> Pinus radiata

<400> 1608

taataattgg	gtactgtgga	gattttcctg	tgcattgacc	attacaatgg	ctgagacagt	60
ggttttgaag	gttggcatgt	cttgcggaagg	ttgtgttgga	gctgtaaaac	gagttctcaa	120
taaaatggaa	ggtgtggaaa	catatgatgt	gaacttgaag	gagcaaaaag	taactgtgaa	180
agggaaactg	aagcctgatg	ccgttctgca	aactgtttca	aaaactggaa	aggaaacatc	240
cttctggcca	gaagagaagg	atgccaccac	gtgatgggtgc	atattctcag	gtttaatata	300
gatatggaca	tatattgaac	atgctttttt	gaggcacttt	taataatatt	tctaata	357

<210> 1609

<211> 222

<212> DNA

<213> Pinus radiata

<400> 1609

ccaagaacgc	gggaaggaag	aggatgaatt	tgtacagagg	catcagacag	cgtccatggg	60
gaaaatgggc	tgcggagatt	cgagatccca	gaaagggggg	tagggtttgg	cttggaaacgt	120
ttaacacggc	cggaggaagc	tgccagggcc	tatgacgcag	aggcttagaa	gattagagga	180
aagaaagcta	agcttaactt	taccgatgat	tcatgctcag	ta		222

<210> 1610
 <211> 302
 <212> DNA
 <213> Pinus radiata

<400> 1610						
gttcagccta	tggttgtctg	ctaaatcgct	tccacaaatg	tcgatccatc	tggagagacc	60
tcttataact	gaaatacaag	tgcgtatgga	ctgtaatggc	tgcgttcaga	agatacgcag	120
agctctgcaa	actcttcaag	gcatttatga	cgtttacata	natttcccc	aacaaaaggt	180
gacagtggta	ggatgggttg	atccagacct	attaatgaag	gccataaaga	aagccgggaa	240
aagagccaaa	ctgtgcagcc	acgtacgcga	tgaagaaacg	gtcagagagag	ccgacccggc	300
gg						302

<210> 1611
 <211> 268
 <212> DNA
 <213> Pinus radiata

<400> 1611						
gaatgaagtt	agatacggca	aagaaaggcc	ttcctccagg	caccatggga	tggcctctct	60
ttggagaaac	tcttgatttt	ctcagatatg	gtcaacaatt	tatcaaaaac	agaaaggcca	120
gatatggaga	tttgttcaag	actcacattc	taggatgccc	gacggtgata	tcgacggatc	180
cagctctcaa	cagatatatc	ttattgaatg	aaggccgagg	actaattcct	ggatacccg	240
agtctatgct	tgacacattg	ggaaaatg				268

<210> 1612
 <211> 312
 <212> DNA
 <213> Pinus radiata

<400> 1612						
gctcactgga	ataaacactc	ttcgcatcca	gcccttcaaa	cttcccctct	tggcccccat	60
gatgcgaagg	tgcgcagtaa	ggctgtgggt	atctgtggca	gtgacgtcca	ctatttgagg	120
acattacggg	gtgcggactt	tattgtaaaa	gagccaatgg	tgattggtca	tgagtctgct	180
ggaataattg	aggaggttgg	cagtgaagtg	aaacatctgg	ttcctggtga	ccgcgtagct	240
ttggagcctg	gaatatcgtg	ttggcggttg	gaccaatgta	agcgaggctc	ctacaatttg	300
tgtcccgaga	tg					312

<210> 1613
 <211> 324
 <212> DNA
 <213> Pinus radiata

<400> 1613						
gctggctaca	gcttatgcct	tccgattcgt	gggtgaatgg	atgaaatggc	tatacttgga	60
tgtaacaaaa	cgtttgggag	caaaggattt	ctcaacattg	gctgaagcac	atgcatgtac	120
tgctgggtta	aagtcattga	caacatcagt	gactgcggt	ggcattgaag	attgtcgtaa	180
gctttgtggg	ggacatgggt	acttgtgcag	tagtgggctt	ccagagctgt	ttgctgtata	240
tgttcctg	tgacatatg	aaggagataa	cacagttctg	cttctacagg	tagcaagatt	300
cttgatgaag	acagtccaac	aact				324

<210> 1614
 <211> 395
 <212> DNA
 <213> Pinus radiata

<400> 1614
 gttcccagga gaggagagcc tcagctgtct cgatctggcg ttaaggggtt acngaagaag 60
 aatttcgaag atggtttagat cttcttgcta ttcaaagcaa ggtcataggc gtgggatttg 120
 gacccctatg gaggatatga ttctctctga atacattcga attcatggca gtgatggatg 180
 gaaaaatata gctaaacgag caggctcttaa acgatgtgga aagagttgca gattaccggt 240
 ggttgaaacta tcttcgcccc gacattaaac gtggtaacat ttctcctgat gaggaggacc 300
 tcattattag gttgcatggc cttcttgga atcgaggac gactaccggg tcgaacagac 360
 aacgaaatca agaattactg gcacactcat atgag 395

<210> 1615
 <211> 231
 <212> DNA
 <213> Pinus radiata

<400> 1615
 ttacattcaa ccaagctcat cacatggcgt cgganaagga agctgctctt gctgccacac 60
 caccagaaga tgataaacct acaatatctg acnaaatact gcngaaagag attcccaatn 120
 cagnggttta caaggatgag aaggtacttn cnttcaggga tatngcnccc caagcaccta 180
 ctcacatcat tatcatcccc aaagtaaggg atggccttgac tggcctatct a 231

<210> 1616
 <211> 396
 <212> DNA
 <213> Pinus radiata

<400> 1616
 ccggtccggg cgggtggagag catcagcctt ggagttacag accaggaaaa tacaagatgg 60
 gtagatctcc ttgctgctcc aaagaggggc tcaaccgcgg ggcttgacc aaaagggagg 120
 atatgattct ctccgaatac gttcgaattc atggcgatgg tggatggaga aatcttccgg 180
 aaaaagcagg tcttaagaga tgtggaaaga gttgcagact acgctgggtt aactatcttc 240
 gtcccgatat taaacgcgga aacatttgcc ccgccgagga ggagcttatt attcggctgc 300
 atcgccctct tggcaatcgg tggctactga tagcaggacg actgcctggg cgaacagaca 360
 acgaaatcaa gaactactgg aacactcatc ttgagc 396

<210> 1617
 <211> 296
 <212> DNA
 <213> Pinus radiata

<400> 1617
 gtcggcgctg gcgggcggtg cgaggaaaacg gcgggcgctcag ctgtgaagga aacgcatttc 60
 anaggcggtga ggaagaggcc gtgggggaga ttcgctgcgg aaatcagaga tccctggaag 120
 aagacgagac tctggctcgg cacttttgac acagccgaag aggccgcccg cgcctatgat 180
 aatgccgcca gaaatctacg cggccccaag gccaaaacca atttcgctat ccacgacgat 240
 agcgcccgcc ctgttcaaca gtggcggcgg acgcgcgcgtc cctagtcagc gacaag 296

<210> 1618
 <211> 381
 <212> DNA
 <213> Pinus radiata

<400> 1618
 gagctttctc tcaagaacat tcttacagca aatgagcaga ctacaactgc agaaccagga 60
 aataataata cagttgtttt cctggaatct attactaatc catctgtcag agttgcggat 120
 ttaccgtcta tttccactgt atgtaaaaaag tatggagcat ttcttatagt agataataca 180
 tttgtacac cgataaggat caagcccatc aagcaggggtg ctgacatggg cattcattca 240
 gtaacgaaat ttcttggtgg ccatagtgat ctgggttgag gagtagttgc aggtctctct 300
 caccacatag agttagcctc aaagctggta ggctgcgtggg ggctgcttgc tgctccattc 360
 gattcatggc ttgccactcg c 381

<210> 1619

<211> 373
 <212> DNA
 <213> Pinus radiata

<400> 1619
 cggtccatgt gacttcgaca tccatgagtc ctgcgcccac gctcctaacg ccactctcca 60
 ttctctgtcat cccagcatc ctctcgtgtt gagggacaaa ccagtttcac cacaacgcgt 120
 atgcgacgtc tgtggaaggg atgttttagg attcgtttat gactgccgtg aatgtgacgt 180
 ggacgttcat ccctcctgtg cacagctgcc gcagacgctg cgccacgctc tgcattccaca 240
 ccacaccctt caactctccc atggacctga agctcccgcc cctcctgcac gctcctgtaa 300
 cgtatgcgga gaagcctgta gccctgggca ctggagctat cgttgcgaaat tagccagtgc 360
 gccgtgtgat ttc 373

<210> 1620
 <211> 137
 <212> DNA
 <213> Pinus radiata

<400> 1620
 cacgggttcc agaccttttg catcttcatt attcttccgc ctgtgaaaag atggggagat 60
 ctccgtgctg tgagaaggct catactaaca aaggggcctg gactaaacaa gaagatgacc 120
 gccttatcgc tcacatt 137

<210> 1621
 <211> 372
 <212> DNA
 <213> Pinus radiata

<400> 1621
 gttcccagga gaggagagcc tcagctgtct cgatctggcg ttaaggggtt acagaagaag 60
 aattttcgaag atggttagat cttcttgcta ttcaaagcaa ggtcataggc gtgggatttg 120
 gaccctatg gaggatatga ttctctctga atacattcga attcatggca gtgatggatg 180
 gaaaaatata gctaaacgag caggtcttaa acgatgtgga aagagttgca gattacgttg 240
 gttgaactat cttcgccccg acattaaacg tggtaacatt tctcctgatg aggaggacct 300
 cattattagg ttgcatggcc ttcttggaac tcgcaggacg actaccgggt cgaacagaca 360
 acgaaatcaa ag 372

<210> 1622
 <211> 464
 <212> DNA
 <213> Pinus radiata

<400> 1622
 ctgaattgca tttcttagtc ggcaaaaata ttaaagagtc aagacaaaaga ggggggttacg 60
 ggagcaggct gcgggttcga tccaagata aggaaaaaag aaagaaaatt tcatgaattg 120
 ggctctgtaga ttccagtcac gaaattaaaa cctatcggtc tcgtcttcga gctaaagttg 180
 gggaaaaagc taagctctca gggaatgggt tcccgacaaa tgctgtcctc taatgggtggc 240
 cggacacctc agttccaacc actcgttcgt cagaattctt tatacaattt aacgctggag 300
 gaggtccaga accagctcgg ggacgccagc aagccactta gcagcatgaa catggacgag 360
 ctctgaaga acatttggac acaagagaaa gccaggctat atccatggcg atcggcaatg 420
 ggcccatgaa cgggtgttcct cccaactctg cccctgccag cgggt 464

<210> 1623
 <211> 436
 <212> DNA
 <213> Pinus radiata

<400> 1623
 aagaaaaatg ggctgaatag tctcaggag gggttttaaat tgaatgagta gggttttctg 60
 ggggtgagatt ctttcatatt tatgcgtaaa acgttgactc caatcggcgt gaaacaaacc 120
 aatagaaatc ccaaattgat ttctttcaat ttcatctgat acacagagag aattcagtca 180

gtggaagtca	tgtctaacat	aacgtctgcc	tctggagagg	ccagcgtttc	ttctggcaat	240
acagctgcca	tggctgatag	tgagagcatt	cggcaacagc	caccacaaca	attctcaaca	300
ccaacgtctg	caaattggcg	cggaaatata	aacagtgtct	agcaaaaccc	agagaagaag	360
agaaagagaa	atcttccagg	aactccagac	ccagatgcag	aagtgattgc	tctgtcgcct	420
aggactctca	tggcta					436

<210> 1624
 <211> 337
 <212> DNA
 <213> Pinus radiata

<400> 1624						
gccagagctg	tggctgttcc	cagaagagga	tatcatcagc	tgtccagttt	gtcctaagag	60
actacagaag	aagaatatag	aagatgggta	gatccccctg	cccccaaaa	gaagcgctta	120
accgtggggc	ttggacaggc	atggaggata	cgattctcac	cgagtacatt	cgagttcatg	180
gcagtgggtg	ctggaaagat	atctccaaaa	gagcaggtct	taagaggtgt	gcaaagagtt	240
gcagattgcg	ttggctgaac	tatcttcgtc	ccgatattaa	acgtggtaac	atttctccc	300
aggaagaaga	gctcattatt	cggttgcatc	gccttct			337

<210> 1625
 <211> 421
 <212> DNA
 <213> Pinus radiata

<400> 1625						
ctgaagtgcc	gtcgattgtt	cgggaggata	gcgttttcga	agttcgttgt	tgagttatct	60
cgcgagactg	tagaatttta	gggttggttt	ccacaaaccg	acttttcccg	acttcaaatc	120
ttgatattga	agtgcattgg	ccggcgagaa	aagaaagatt	aatagaatag	ctaacgcttc	180
ggccaggcag	gtcaccttcg	cgaagaggcg	gagggggctg	ttcaaaaaag	ctcaggagct	240
atcgatttta	tgcaagccg	atgtagccct	cctcggtttt	tcttcaactg	gaaagctgta	300
ccagtactcc	agctccagca	tgaaaatgat	attggaccag	tatattttgt	attctagatc	360
aattcaaaag	gatggaaagc	caaactctga	ggagagtcac	gatatccaaa	agataaacca	420
c						421

<210> 1626
 <211> 315
 <212> DNA
 <213> Pinus radiata

<400> 1626						
tgcatttcag	ccagtccatg	gtttcaaggt	cgaatctcct	tgctgacatg	aatccatcaa	60
tatatataga	gagagagaaa	tatacgtttt	tcagatttaa	gcatggccgt	ttaataatct	120
gcattgcatg	gagagattgt	atttgtgtta	gaagttgatt	ttctgttttt	tctctttcag	180
ttagttagtc	caataaagca	gagatgggtc	gtgctccatg	ctgcacaaaa	gttgggtctca	240
acaagggagc	atggctctgc	gaagaggata	gtcttctggg	aagatatatt	caaactcatg	300
tggaaggcaa	ttgga					315

<210> 1627
 <211> 373
 <212> DNA
 <213> Pinus radiata

<400> 1627						
cacatccata	catgtggggg	ggacagccgt	tgatgccacc	ttatgggact	ccactaccat	60
atcctgcaat	gtatccacat	ggaggaatct	atgcacatcc	ttccatgcct	ccgggtgcac	120
ttcogtatgg	tactatgga	atgccatcac	ctggcaatgc	tgaagttaca	acgactttag	180
cacttccaaa	tgctgaagca	gaagccaagt	cctcggaagg	caaagagcgg	aataacaatga	240
agagatcaaa	aggaagttaa	ggaagccttg	gaatgattac	tggcaaaagga	ggagaagggtg	300
gcaaggcaac	atcgggatct	gcaaatgagg	ccatgtcaca	aagtggggac	agtggcagtg	360
acggttcaag	cga					373

<210> 1628
 <211> 512
 <212> DNA
 <213> Pinus radiata

<400> 1628
 cggtaatagc atagagggat tatacagagg tggattgtta ttgaaaccca gtagtggagg 60
 tagagtcttg acaagttggg acaaaggagg gaattccacg gatgttatag atatggatat 120
 agggactggg agactaacag gttctgaaag gagacatgac aaacggaatc ctacattttac 180
 agaccattat agacattcag acagtgatcg aatgaagatg aacagctact tatatccaga 240
 aaacaacaat agcacggcgc ttgttgcgct tctgtttgtt cccaggaacg acaaacttgt 300
 aaagattgat ggcaacctta taatccatgc agttctagct ggggaaaaag cctcgagagc 360
 attatctgcc tcacagtcta gaggcaacaa agatgggcat gtagacacca tttcacttca 420
 aaaggaatat gaaaagaata gtttggcagt cagaacagaa aggcacgtg ctcttgctgc 480
 tgctgccgcc gccactacag attcagccag aa 512

<210> 1629
 <211> 395
 <212> DNA
 <213> Pinus radiata

<400> 1629
 gagaaaaagg acctgaccat atcgaaacat tcacaggggg agattgatca aacacaaata 60
 ccgtaaaatc gcagcgaaaa tccaaaattc caccatgggg actgtggcgg aggatggcag 120
 caagggttac aaggccgtaa atccccatcc caaaaagggc gtcgcctcgt ggctgggtgga 180
 catgggtggag aaactgggtg ttgaaacttc tgcgttgat agttcgaaga agcctctgca 240
 ttttcttttg gggaacttcg ctccagtctc ggaaactgcc cccaaatcgc acctgcctgt 300
 tgttgggcaa cttcctagt gcttggatgg agagttcgtg cgcgttggtc ccaatccgaa 360
 attcgcaccg gtagctggct atcactgggt tgatg 395

<210> 1630
 <211> 285
 <212> DNA
 <213> Pinus radiata

<400> 1630
 ctctgcattt tcttttgggg aacttcgctc cagtctcgga aactgcccc aaatcgcacc 60
 tgctgttgt tgggcaactt cctagttgct tggatggaga gttcgtgcgc gttgggtcca 120
 atccgaaatt cgcaccgta gctggctatc actggtttga tggagatgga atgatccatg 180
 gtctcagaat taaagatggt aaagccacat atgtgtcacg ttatgtgaag acatcacgct 240
 tgaaacaaga ggaatacttt gggaaagcaa aattcttttaa gattg 285

<210> 1631
 <211> 438
 <212> DNA
 <213> Pinus radiata

<400> 1631
 gtttttcaaa gctcaggttt aacagaaaat acccgggaaa attaacaaga aaaaaggaaa 60
 aacagagatt ttgtttattt ctgttattag tctgctaaat tggtttttga taatttaatt 120
 aattaaggcg ggggcccgc cctccaggca gtggcggaaga ccagtgggcg gccctgccac 180
 ccgaggagga gagccgcgtg cgttttctcg acttcgaacc cgcggctatg gaggcgctgg 240
 atcaggtact ctgcctgcgt ctcggtgaag ttgctgaagg ccaactgggga gaagccggcg 300
 gcggcgaaca gggctctcca tggcggagcc ggcggcggag gaaatgggtg cgtcgatctt 360
 cggagctagc aggaacttct cgatcttgtg cacggcctcc atgttgatgt tcacggcatc 420
 cagtgaatcg aacaggaa 438

<210> 1632
 <211> 457
 <212> DNA
 <213> Pinus radiata

<400> 1632
 ccatatcgaa acattcacag ggggagattg atcaaacaca aataccgtaa aatcgagcgc 60
 aaaatccaaa attccaccat ggggactgtg gcggaggatg gcagcaaggg ttacaaggcc 120
 gtaaattcccc atccccaaaa gggcgctgcc tcgtggctgg tggacatggg ggagaaactg 180
 gtggttgaaa cttctgcgtt gtatagtctg aagaagcctc tgcattttct tttggggaac 240
 ttcgctccag tctcggaaac tgccccaaa tcgcacctgc ctgttggttg gcaacttcct 300
 agttgcttgg atggagagtt cgtgcgcgtt ggtcccaatc cgaaattcgc accggtagct 360
 ggctatcact ggtttgatgg agatggaatg atccatggtc tcagaattaa agatggtaaa 420
 gccacatatg tgtcacgtta tgtgaagaca tcacgct 457

<210> 1633
 <211> 318
 <212> DNA
 <213> Pinus radiata

<400> 1633
 aattgttgat aatcagattc cattgagtgg acctgattca gttattggta gggcacttgt 60
 tgtccatgag ttagaggatg acctggggaa aggtgggcat gaacttagtc tgacaactgg 120
 caatgctggg ggcagggttg cttgtggtgt ggttggactc actcccattt aaggcccagt 180
 caaatatgga atgatcttca aaggtcatgg acatcgatg aaaccagtga ctgcaataat 240
 aattccaaaa tatatgttct ttatcctcgc aagattgtta gcaattgtga tttgtttttg 300
 gtattaacga gttgcact 318

<210> 1634
 <211> 211
 <212> DNA
 <213> Pinus radiata

<400> 1634
 gccgtggctg ttcccaggag aggagagcct cagctgtctc gatctggcgt taaggggtta 60
 cagaagaaga atttcgaaga tggtagatc ttcttgctat tcaaagcaag gtcataggcg 120
 tgggatttgg acccctatgg aggatatgat tctctctgaa tacattcgaa ttcattggcag 180
 tgatggatgg aaaaatatcg cttaacgagc a 211

<210> 1635
 <211> 350
 <212> DNA
 <213> Pinus radiata

<400> 1635
 ggttttcttta tatttatgtg cagattgcct ggaacggacac ttgccaatgg acgtctcata 60
 tggctgtgcc aggccaacga agcggacagc aaagtcttcc cacgtgctct tcttgctaag 120
 agcgctctta ttcagactgt tgtatgcac cctctcgcg acggtgtctt ggagtttggg 180
 actactgaag tggagcgaga agaccctggg ctagtccaac gcaccataag cttttttttg 240
 gagtacccea aaccgatatg ttcagagcaa tctacatcca gccacagtg ctccagacaga 300
 gacgaaaagg atcaagtggg catggtcaca ataatgtcct ccgacagcat 350

<210> 1636
 <211> 356
 <212> DNA
 <213> Pinus radiata

<400> 1636
 ggttgctgga ttccaacgga aaggatttgc ctctttcatc agtctataat cgaggatctc 60
 tgcagtcctt tactagtga ggtcattccg tttcaacagt aatcctccgt attgaaaagg 120
 aggaagaaga gtttgtcttt gttgacattc ctgaaagacc aattccctct ctactacgca 180
 attatagtgc tctgtgctg cttgtttcag atatcactga tgatgatttg tactttctac 240
 ttgcacatga ttcagatgag ttttaaccggg gggaggctgg ccagacattg gcaagaaaac 300
 tcatgctctc tctcgtagat aaggcgcaac agaatacaacc attgagtgtg gaccca 356

<210> 1637
 <211> 362
 <212> DNA
 <213> Pinus radiata

<400> 1637
 cgaggctccg ttcaacccct ttcattcttca atcggtccaa ggccctcttcg gtctgcctgg 60
 gtgcgtttct gaattttctcg ccaagtgaat gagtcgatcc agccttggtt cagcgaaacc 120
 tgttggtggtt ttgggttttc ttggcttttg ccttttcatt ctttggttcc ttggattcga 180
 actcgagatc tcctgaatat tatggcacag gagagctgga accaggagga gaccgggtgc 240
 caagtcccgg aagggtcat gcgctgtgcc aacaactgtg gcttcttcgg aagtccggcc 300
 accatgagtc tctgctccaa gtgttaccgc gaattcgtgc tgcctcaactc ccctaaatcg 362
 tc

<210> 1638
 <211> 359
 <212> DNA
 <213> Pinus radiata

<400> 1638
 cgaaactcga atcgatatgc tttgtggccg gttcaaatat ttgagctggc ttagcttctc 60
 tgggttcagaa atggcggaact aaagtaatat tgtgccccga ggtctgggtg tcgaatctcg 120
 ttggcgtgaa aggtcaaatt tttctctcga gtttcattga ttctgaaaaa ctggcatagc 180
 tatggcgatg agcaatggga gattgtgtga agatttggat aggattaagg ggccgtggag 240
 ccccgaggag gacgcgtcgc tgcagaggct tgttcagaaa tacgggcca ggaactggac 300
 cctgataagt aaaggaatcc cggggcgatc cgggaaatcg tgcaggctac ggtggtgca 359

<210> 1639
 <211> 299
 <212> DNA
 <213> Pinus radiata

<400> 1639
 cgagcaacag cgaagccgat ttccaaagat ggatagggag aaactcatga agatggctgg 60
 tgcagtcgc actggcggaa aggggtacaat gcgaaggaaa aagaagaaa ttcataagac 120
 tgccagcggc gatgacaaga gacttcaaag taccttgaaa agaataaggc tgaataacat 180
 ccctgctatt gaagaagtca atatttttaa ggatgaccat gttattcatt ttgctaacc 240
 aaaggtccag gcttctattg ctgccaacac atgggtgggt agtgggcatc gcaacaaa 299

<210> 1640
 <211> 300
 <212> DNA
 <213> Pinus radiata

<400> 1640
 gaaactatga accgcgcata aaatcgaagg cgaggagtgc tagaagaggc ggtgaagttg 60
 aagttgttat ggggggaatt atgctggtcg ggtcgacgat gattcctgcg ggcggcgcgg 120
 cggcagcggc ggagacgtcg gtggaggaag gaggagaatt gaataagatc gaaagcccta 180
 caccatcacc aagtccagag aaagctggac tgagcaggag cacaacaaat ttctgcgaag 240
 ctatgcagcc tgtttgatag ggactggaag aagaattgaa gcatttggtt ggttcacaag 300

<210> 1641
 <211> 311
 <212> DNA
 <213> Pinus radiata

<400> 1641
 gttcagctgt tcgcaaagca cggagcgaaa gtcataatcg cagacgttgc agagaaagct 60
 ggcagaaagc ttgcagaatc cttttctcca gcacggcaa cttatgtgca ctgtgatgtc 120
 agcaaagaag aagacgtgag cgcggctgtg gatctggcta tggataagta tggtaactc 180
 gacattatgt ataacaacgc tggaactaac gacagcttcc tggatgaagag cgtggcagag 240

tatgatattgg agcaattcga tcgagtgatg aacgtaaacc tgaaaggagt gatgcacggc 300
 attaagcacg c 311

<210> 1642
 <211> 350
 <212> DNA
 <213> Pinus radiata

<400> 1642
 agggatcagg caacgtccat gggggaaatg ggctgcagag atcagggatc ccagaaaagg 60
 cgctagggtt tggtcgggta cctttaatac ggccggaggaa gctgctcggg cttatgatgc 120
 agctgcacga aagatcagag gtaagaaggc gaaagtaaatt tttgttgatg agccaccacc 180
 ctccgtttaag aaggaaagta ataatgctaa ggggttccaa aaagggtcca gcaagaaaat 240
 aaaatcatat ctaccccaaa gcctgacttt ttcgaagggt tcaaaacggc gaacccttcg 300
 attgcccaat acaacttcca tcagaaattc ccaaacccta actgtgatga 350

<210> 1643
 <211> 322
 <212> DNA
 <213> Pinus radiata

<400> 1643
 gacttttgc cgaactgtt ctgctgaaac aaaatccagt attgagctag gtttagaatc 60
 gggtttgcgt gtcactctgg agaggcgatc cattcagctt cgcaggcccc cgaagatggc 120
 gttcgccggc acaaccaga agtgcaaggc atgtgaaaag acggtctatt tggttgatca 180
 attgacagct gataattctg tttttcaca atcctgtttc cgctgccatc actgcaatgg 240
 aactttaaag cttagcaact attcgtcgtt tgagggaggt ctatattgca aacctcattt 300
 tgaccagctg ttttaagagaa ca 322

<210> 1644
 <211> 345
 <212> DNA
 <213> Pinus radiata

<400> 1644
 gccgaaactc gaatcgatat gctttgtggc cggttcaaat atttgagctg gcttagcttc 60
 tctggttcag aaatggcgga ctaaagtaat agtgtgcccc gaggtctggt gttcgaatct 120
 cggtggcggt aaagggtcaaa tttttctctc gagtttcatt gattctgaaa aactggcata 180
 gctatggcga tgagcaatgg gagatttgtt gaagatttgg ataggattaa ggggccgtgg 240
 agccccgagg ggacgcgtcg ctgcagaggc ttgttcagaa atacggggccg aggaactgga 300
 ccctgataag taaaggaatc ccggggcgat ccgggaaatc gtgca 345

<210> 1645
 <211> 508
 <212> DNA
 <213> Pinus radiata

<400> 1645
 cgtgtcaaag cccaaacgac ccgtttcaac gcttataaca tattatgtga gtatcggagt 60
 ggaaaggcag caccgagaaa catatccgag gagaaagtat actcatatat taacgtaacg 120
 gaaaatggaa ataattgatg tcaaggcaaa ggtattacag aggtccatcc tcatcccaag 180
 aaaggcatcc tttcatcggg aattgatttg gccgagaaaa tcgtgggttcg ctgcgtctac 240
 ggctccgcca aacctctgca ctacctcgtt ggtaatttcg caccgggtcg acaagaaact 300
 ccgcccgcaca cagacttgtc cgtcattgga aatctcccta aatgcttggg tggagaattt 360
 gtgcgagtcg gtcccaatcc cagattttgc ccccgctcgt ggctatcatt gggtcgacgg 420
 agaccggaat gctcatgggt tgaggattaa agatggcaaa gcagcttatg tttcgcgttt 480
 ccgtcaaaac ttcacgtctc aagcaaga 508

<210> 1646
 <211> 368
 <212> DNA

<213> Pinus radiata

<400> 1646

tggtcttcc	cggcagacct	agtaagccga	ctactgtaaa	tttattcttt	tagggttaca	60
gaaaaagaaa	atacaagatg	ggcagatctc	cttgctgctc	aaaagaagg	ctcaaccgtg	120
gggcctggac	caaaagggag	gatatgattc	tctccgaata	cattcgaatt	catggcgatt	180
gcggatggag	aaatatgccc	aaaagagcag	gtcttaaacc	gtgtggaaag	agctgcacga	240
ttacgatggc	tgaactatct	tcgccccgac	attaaacgtg	gaaacatttc	ccctgatgag	300
gaggaactca	taattcggct	ccatcgccct	cttggcaatc	gatggtcgct	tatagcattg	360
aagattac						368

<210> 1647

<211> 367

<212> DNA

<213> Pinus radiata

<400> 1647

cttcccttca	tcagatgttt	cccaggctgc	actcatcagc	tgcagcacca	cgcggttttg	60
gattctccct	gttctttgtt	ctgttgctgt	aaagattggg	tgcaggctga	atcgcccagg	120
ccgatttgaa	ttctcctgag	gattgacaag	atgacgcgca	agtgcctcga	ctgtggcaac	180
aacgggcata	actccaggac	gtgccctaac	cgcgggcggg	tgaagctctt	cgcggttcgg	240
cttaccgatg	gcccgatcag	aaagagcgct	agtatgggga	atttgatgat	gatgtccaac	300
cctagctctc	ccgctgacct	ctccnagccg	gcctctgcgc	cttctgctgc	cgcgggcgcg	360
gcggcca						367

<210> 1648

<211> 511

<212> DNA

<213> Pinus radiata

<400> 1648

gtggctcttc	ccggcagacc	tagtaagccg	actactgtaa	atttattctt	ttagggttac	60
agaagaagaa	aatacaagat	gggcagatct	ccttgctgct	caaaagaagg	gctcaaccgt	120
ggggcctgga	caaaaaggga	ggatattgatt	ctctccgaat	acattcgaat	tcattggcgat	180
ggcgatgga	gaaatatgcc	caaaagagca	ggtcttaaac	ggtgtggaaa	gagctgcaga	240
ttacgatggc	tgaactatct	tcgccccgac	attaaacgtg	gaaacatttc	ccctgatgag	300
gaggaactca	taattcggct	ccatcgccct	cttggcaatc	gatggtcgct	tatagcagga	360
agattaccag	gtcgaacaga	caacgaaatc	aagaactact	ggaacactca	tatgagcaag	420
aagctgcttc	cattgaacga	atctcaaccc	aagactttgc	ctgtccccaa	gaggaggtcg	480
caatctcctt	ctccccctga	aaatcgagtc	t			511

<210> 1649

<211> 364

<212> DNA

<213> Pinus radiata

<400> 1649

tgcgctcca	tccgaccaa	caagtggggg	acatgcatat	tgcaagtgtg	gagaacactg	60
cagctgcaat	ccatgtaact	gttcaaagat	tgacgagact	gttagtgagg	aatccttctg	120
taaatgtgga	gagaattgag	cctgtgaaac	atgcacctgc	agcagagctg	gaatatagcc	180
tagttgattg	tttttctcag	ccagaactta	ggattccatg	accactagta	ataagatgca	240
gtatcaatag	cagctgatgt	ttatgtatgc	agtaagttta	taaaagagag	tggttacttt	300
ttggctttag	taatttggtg	cttatgttat	gtatgtagta	agtttatctc	caaatacaga	360
gccg						364

<210> 1650

<211> 354

<212> DNA

<213> Pinus radiata

<400> 1650

caagagtaaa	ccogaaggaa	tagaagggga	aggaggcatc	ggcagcggtg	ttcctcctcc	60
tctcctctcc	tgcattttctc	aaactcaa	acctctcctc	tcacatcatg	gaaggcggag	120
tcgtctttga	atctgtgcaa	aaccactgg	atcgctgaa	caactggaaat	atggaccatg	180
gttggtgccc	ttacaggaga	cgatgtcgga	ttcgggcccc	ttggtgcaat	gagatctatg	240
attgtaggca	ctgtcacaat	gaagccatga	gccatctaaa	ggacccttg	ctgcgccatg	300
agctcccaag	atacaaagtt	gaacgggtta	tttgttctct	ctgtgacact	gagc	354

<210> 1651
 <211> 424
 <212> DNA
 <213> Pinus radiata

<400> 1651						60
cttcctgggtg	ttggtgctgt	gattttctctg	ccattctgtg	ttgggtttat	ggtttttagct	120
tactacaag	ccttttagcaa	gcctcacaaa	taagctttgc	agtaggatgt	ctcctcccc	180
gtcatattcc	atgtttccca	attcaggaat	gggcttaaat	ccctcagtga	catcttcaga	240
accctctagt	caggtctccg	gatcgatccc	ccatcaatat	tcaggctccg	aggaagaccc	300
taaactgacg	atcgatgaaa	gaaagcagaa	gagaatgctt	tctaacagag	aatctgcaag	360
gaggtccaag	atgagaaagc	aacagcattt	ggatgaattg	agagcccgaa	cagctcatct	420
cagagcagag	aacagtcata	tgctaacaaa	attcaacatt	gcttcacaga	aatacatgca	424
gctg						

<210> 1652
 <211> 422
 <212> DNA
 <213> Pinus radiata

<400> 1652						60
gtcaatgctg	cccgtcgaac	tggaggccct	attgaaacta	tcaagaaatt	taatgcagga	120
tcaaacaag	cagcctcgag	cagcaccacc	ttgaacacca	agaagcttga	tgatgagaca	180
gaagttctcg	ctcatgaaag	agtttcatca	gatttgaaga	aaaacataat	gcaagcccgt	240
ttagataaaa	agttgacaca	agcccagctt	gcacagcaaa	tcaatgaaaa	acctcagatt	300
attcaagagt	accgagtcgg	ggaaagcaat	tcccaatcag	cagatcattg	ccaagctgga	360
aagggtcctt	ggtgtgaaac	tgctgtggaag	cactggaagt	ggaaagaaat	aactggaagt	420
atgcaatagc	aataacatgt	catagagttg	tgtgatttgg	cgttcaccac	ccacacctgc	422
tt						

<210> 1653
 <211> 357
 <212> DNA
 <213> Pinus radiata

<400> 1653						60
gnacgagctc	gatctggcct	taaggggtta	cagaagaaga	atttcgaaga	tgggtagatc	120
ttcttgctat	tcaaagcaag	gtcatagccg	tgggatttgg	accttatgg	aggatatgat	180
tctctctgaa	tacattcgaa	ttcatggcag	tgatggatgg	aaaaatatcg	ctaaacgagc	240
aggtcttaaa	cgacgtggaa	agggttgacg	attacgttgg	ttgaactatc	ttcgccccga	300
cattaaacgt	ggtaacattt	ctcctgatga	ggaggacctc	attattaggt	tgcatggcct	357
tcttggtcaat	cgatggtctt	tgatagcagg	acgactaccg	ggtcgaacag	acaacga	

<210> 1654
 <211> 306
 <212> DNA
 <213> Pinus radiata

<400> 1654						60
gcgcattggt	cagctgtgtc	gcagaacacg	gagcgaaagt	cataatcgca	gacgttgacg	120
agaaagctgg	cagaaagctt	gcagaatccc	tttctccagc	atcggaact	tatgtgact	180
gtgatgtcag	caaagaagaa	gacgtgagcg	cggctgtgga	tctggctatg	gataagtatg	240
gtcaactcga	cattatgtat	aacaacgctg	gaactaacga	cagctttctg	gtgaagagcg	300
tggcagagta	tgatatggag	caattcgatc	gagtgatgaa	cgtaaacgtg	aaaggagtga	

306

tgacg

<210> 1655
<211> 368
<212> DNA
<213> Pinus radiata

<400>	1655					60
cttcagtttg	ccattgaaga	ccaataaata	attattgtga	agcagcagcg	ttttaatcag	120
agatccagca	agaagaggac	caggaaaaat	catttgcaga	acaagaagat	aatccaagat	180
gtcaagcaca	cgcagccctc	agtgtggggt	cggagaaaact	tgcgcttgcg	ccgattgcaa	240
gtgtggagtt	gtgagtattg	cgcctccatc	cgaccaaaca	agtgggggac	atgcatattg	300
caagtgtgga	gaacactgca	gctgcaatcc	atgtaactgt	tcaaagattg	acgagactgt	360
tagtgggaaa	tccttctgta	aatgtggaga	gaattgcgcc	tgtgaaacat	gcacctgcag	368
cagagctg						

<210> 1656
<211> 333
<212> DNA
<213> Pinus radiata

<400>	1656					60
ttgaattctt	gtcttccccc	cagctgaggc	tctctgagac	caaggtgaga	ttcagccagt	120
agtaagctat	agattgatag	ttcagagaaa	agactgaaag	gcaaaaaacta	tatagacata	180
acaacggaga	gagcagcaca	ggaaccaggt	tgcataatgg	ctaggcctca	aagatacaga	240
ggagtcctgc	agaggcactg	gggatcatgg	gtctctgaaa	tccgccatcc	cttattgaag	300
accgaaatat	ggctaggaac	atttgaaaca	gcagaggatg	cagcacgagc	atatgatgaa	333
gctgcaagga	tgatgtgtgg	gccgagagct	aga			

```
<210> 1657
<211> 355
<212> DNA
<213> Pinus radiata
```

<400>	1657					60
gttccccgtc	tcttcggtct	gctaggcatt	tctctgcat	tcttcttctt	ctgctcgggg	120
tctctctggt	gaaatcgccc	ccgcaggagg	agggctgagg	gcagggtctg	gctcgggtctg	180
gttcgtttcg	gcaggagtta	tctcagggtt	tctctctga	ttttctgcgc	cttcggactc	240
gggcttacag	ttacagcatt	tggaaaatgg	cgtcacagga	gagctcaaaa	atgcaagagg	300
aagggagtgg	gagacaagtg	ccggaagggc	ccattcactg	tttgaacaac	tgcggcttct	355
tcgggagcgc	ggccaccatg	aacttggtgt	ccaagtgtta	cagagagctt	aacgc	

<210> 1658
<211> 341
<212> DNA
<213> Pinus radiata

<400>	1658					60
ggggaatgat	tcttggccga	ggccatttga	gcgccataca	cattgcggcg	gactgcggga	120
agtattgttt	tcahtaattc	ccttaattgg	gtcccagaat	acgtttctcag	atccgaaaac	180
ggttcagtc	atcggaggtt	acagcgattc	gaaggcctga	aaaccctaaa	aatacctatc	240
cccctttgtc	tttgaatggc	ggagaactat	ggcagcccgg	atagcagccc	ccggtcggag	300
aacgaatccg	cgggcggtca	catgggcggc	agcgattttc	ctgtgaaaaga	gcaggatcgg	341
ttcctgccta	tagccaacgt	ggggcgcata	atgaagaagg	c		

```
<210> 1659
<211> 353
<212> DNA
<213> Pinus radiata
```

<400> 1659

WO 00/53724

```

gaaaaacaaa gcagaaagcc accatgtggt agaggaggtg ctgaggataa aggagcttct 60
tgatgattct taccagcctc aggaagtctt gctagagtca ctgcagagtt tgtttaacat 120
gcatatttct gtggaggctt tgaaggagac tgatattggt agacaagtga atggactgcg 180
aaaacattct tctgctgaca ttcgaaagct agtaaaagag ctcataagga agtggaaaga 240
tcttgtcgat gagtgggtaa gcaactgcaga tgaagttgca gctgctgcaa ttgttgatgg 300
agattctcca caaggtggtg gcagcagaat ttctcaacag agtattgtgc aga 353

```

<210> 1660
 <211> 317
 <212> DNA
 <213> Pinus radiata

```

<400> 1660
caagagtaaa cccgaaggaa tagaagggga aggaggcatc ggcagcggtg ttctctctcc 60
tctcctctcc tgcatttctc aaactcaaat acctctctcc tcacaatcat ggaaggcgga 120
gtcgtctttg aatctgtgca aaacccactg gatcgctgca acactggaaa tatggaccat 180
ggttgtgccc attacaggag acgatgtcgg attcggggcc cttgttgcaa tgagatctat 240
gattgtaggc actgtcaca tgaagccatg agccatctaa aggaccctt gctgcgccat 300
gagctcccaa gatacaa 317

```

<210> 1661
 <211> 340
 <212> DNA
 <213> Pinus radiata

```

<400> 1661
caatggcggc ccagactatc atcgtgcct ctatggcatc tcctctaaca ttatcaaattg 60
gccactatcc gtttcagtc gagttcaagg ggtccgtggt tcgaatcccg cagagggcat 120
tttcttcgc gcctgcagcc cgggcgctga ccgtcgctgc agaggccaag aaggccgttg 180
ccgtgctcaa aggggaattca caggtcgagg gtgtgtgcag tctctgcag gaagacagcg 240
gtcccacaac agtgaaggtc cgtttgacag gactgactcc tgggaagcat ggctttcatc 300
tacatgagtt tggtagacac accaatggct gcatatcaac 340

```

<210> 1662
 <211> 563
 <212> DNA
 <213> Pinus radiata

```

<400> 1662
ttcgggttcgt attcaggggt tccggagctt gttgtgtggt gttctgcagg tcaggacatt 60
gtaggcctgg ttatacaaga ttctgaagca aactctcgga gcctcgaaga atcggcgcaa 120
atttcaacgg ccttataact atttggaag cagtactctg gatttttctc ccggaacgga 180
tcggagtgtg cgaagcgtaa taatgcctg gaatttgtct tctgcaagat aatattcaat 240
taatctattg tcgaaggaaa tttgagccgt ataagaggat aatcaaaaaga agccggttga 300
tttctccggg attaaaggat ggatcaagaa aactggaaca tcggagctga tggcactggc 360
tgccaactcc agaagggcac actctttgcg ccaataactg cggctttttt ggcagttcgg 420
caacgagaaa cctgtgttcg aaatgttaca gggatctgat tatgaaggag gcccagcct 480
catctgcaat ggccgcccgt gagaagtcatt ttgccgcggg ttctccgatg gaggaggagg 540
cccctctttc caagccagat gtt 563

```

<210> 1663
 <211> 572
 <212> DNA
 <213> Pinus radiata

```

<400> 1663
cagcaatggc ggcccagact atcatcgctg cctctatggc atctcctcta acattatcaa 60
atggccacta tccgttttcag tccgagttca aggggtccgt ggttcgaatc ccgagagggg 120
cattttcctt cgcgcctgca gcccgggcgc tgacagtcgt cgcagaggcc aagaaggccg 180
ttgccgtgct caaaggaaat tcacaggctg aggggtgtgt caatctctcg caggaagaca 240
acggtcccac aacagtgaag gtccgtttga caggactgac tcctgggaag catggctttc 300

```

WO 00/53724

```

atctacatga gtttggtgac acaaccaatg gctgcatctc aacaggagca cattttaatc 360
caaaaaaatt gacacatggt gctcctgagg acgatgtacg ccatgcgggt gacctgggaa 420
acatagttgc gggttctgat ggagttgcag aggcaacaat tggtgataat cagattccat 480
tgagtggacc tgattcagtt attgggaggg cacttgttgt ccatgagtta aaggatgacc 540
tggggaaagg tgggcatgaa cttagcctga ca 572

```

<210> 1664
 <211> 366
 <212> DNA
 <213> Pinus radiata

```

<400> 1664
atcgcttcgg cccgagcaat tttgcttctc tgctaaacga tgggaagagc gccttgctgt 60
gccaacggtg acagaagcaa gggagcctgg accaaggaag aggatgacag gcttacccaa 120
tatattcagg ctcatggaga aggatgctgg cggtctctcc ccaaggccgc aggtctgctt 180
cgggtgtggaa aaagtgtgcag gctgagatgg ataaattatc ttcgccctga tctgaaacga 240
ggaggttttt ctgaagatga agacgatctt attctcaaac tgcacgccct cctcggaat 300
aagtggcttc tgatagcggg tcgtttgcct ggtcgaactg gccacaaaa tcaaaactac 360
tgact 366

```

<210> 1665
 <211> 348
 <212> DNA
 <213> Pinus radiata

```

<400> 1665
gcatcttgct cgtgactgca ccaacaaccc agtttgaat ttgtgcaata tatctggtca 60
tgtggccagg gagtgcacca aggctcgcat tttggatggt antaggggtg gaagatttat 120
tgacgatagg cgtggaagat ttaatgacat aatctgtagg acatgcaacg agccagggca 180
taccagtagg gagtgcactg gaattctcat ctgccacaac tgtggtggcc gtggacatgt 240
tgcatactaa tgcccctctg gtcgtgtgat gctgcgggac atgcgcaggc attgatgctg 300
caatttctac aacaccttga ctttttagat tatctgatt tgacaaa 348

```

<210> 1666
 <211> 422
 <212> DNA
 <213> Pinus radiata

```

<400> 1666
agagagaagg gtgttccctg gactgaagaa gagcacaggc agtttttgat gggccttcgc 60
aagtacggca aaggcgactg gagaagtatt tctagaaact ttgttgtgtc aaggacacca 120
accgaagttg ccagccatgc tcaaaagtac tacattcggc ttggttcgga taataaaaac 180
aagagaagat ccagcataca tgatatcacc actgttcatg gtacagacag gatgccttct 240
cctttactgc acgtttctaa taggcagact aattccccct caacacaggc agaaatgaat 300
cattcaccat gtctgacata tccatctcag atttcacgag gacctctaata aaactctttg 360
ggacctcaaa tagatggtaa ctttctattt tcacctcact atcctctaaa tctgtatacc 422
ca

```

<210> 1667
 <211> 467
 <212> DNA
 <213> Pinus radiata

```

<400> 1667
cttggttgtgt ggtgttctgc aggtcaggac attgtaggac tggttatata agatttcgaa 60
gcaaactctc ggagcctcga agaatcggcg caaatttcaa cggccttata actatttggg 120
aagcagtact ctggattttt ctcccggaaac ggatcggagt gtgcgaagcg taataatcgc 180
ctggaatttg tcttctgcaa gataatattc aattaatcta ttgtcgaagg aaatttgagc 240
cgtataagag gataatcaaa agaagccggt tgatttctcc gggattaaag gatggatcaa 300
gaaaactgga acatcgagc tgatggcact ggctgccaag ctccagaagg gcacactctt 360
tgcgccaaata actgcggcct ttttggcagt tcggcaacga gaaacctgtg ttcgaaatgt 420

```

tacagggatc tgattatgaa ggaggcccaa gcctcatctg caatggc

467

<210> 1668
 <211> 465
 <212> DNA
 <213> Pinus radiata

<400> 1668						60
tccagatggt	cgtggtagac	atgaaatgtt	agagctttat	ttgcaaaata	agcctctggc	120
tgaagatgtg	aatgtgaaa	cccttgctcg	tggtacacct	ggtttcaatg	gtgcagattt	180
ggcaaacctt	gtcaacattg	cggccatcaa	ggcagcagtt	gatggcagtg	agaagttgtc	240
tgccaaacat	ctggaatttg	cgaaggatag	aataatgatg	ggaacagaac	ggaagtcgat	300
gttcctatca	gaggagtcga	aaaagctcac	tgcataccat	gagagtggac	atgcagttgt	360
tgcatttaat	actgtagggt	caaaccctat	acacaaggct	acaatcactc	ctcgagggag	420
tgtctctggg	atggttacac	agctgcctga	caaggatgaa	acatctgtta	ataaaacgca	465
attattagca	cgacttgatg	tttgtatggg	cggacgagtt	gcaga		

<210> 1669
 <211> 421
 <212> DNA
 <213> Pinus radiata

<400> 1669						60
cgaaccatgg	agtctaaggg	acaggctaata	ccatctgttg	cttctgtttg	taatctcagc	120
aagaatggag	agcgacgatt	ggaagggaaa	gttgttatag	taacggggcg	ggcagcggcg	180
ataggagaag	ccattgttca	gctgttcgca	aagcacggag	cgaaagtcac	aatcgagac	240
gttgacagaga	aagctggcag	aaagcttgca	gaatcccttt	ctccagcatc	ggcaacttat	300
gtgcactgtg	atgtcagcaa	agaagaagac	gtgagcgcgg	ctgtggatct	ggctatggat	360
aagtatggtc	aactcgacat	tatgtataac	aacgctggaa	ctaacgacag	ctttctgggt	420
aagagcgtgg	cagagtatga	tatggagcaa	ttcgatcgag	tgatgaacgt	aaacgtgaaa	465

g

<210> 1670
 <211> 445
 <212> DNA
 <213> Pinus radiata

<400> 1670						60
ccatattcgaa	acattcacag	ggggagattg	atcaaacaca	aataaccgtaa	aatcgagcgc	120
aaaatccaaa	attccaccat	ggggactgtg	gcggaggatg	gcagcaaggg	ttacaaggcc	180
gtaaatcccc	atcccaaaaa	gggcgtcgcc	tcgtggctgg	tggacatggg	ggagaaactg	240
gtggttgaaa	cttctgcgtt	gtatagttcg	aagaagcctc	tgcattttct	tttggggaac	300
ttcgctccag	tctcggaac	tgcccccaaa	tcgcacctgc	ctgttggttg	gcaacttcct	360
agttgcttgg	atggagagtt	cgtgcgcgtt	ggtcccaatc	cgaaattcgc	accggtagct	420
ggctatcact	ggtttgatgg	agatggaatg	atccatgggtc	tcagaattaa	agatggtaaa	465
gccacatatg	tgtcacgtta	tgtga				

<210> 1671
 <211> 460
 <212> DNA
 <213> Pinus radiata

<400> 1671						60
cagacttttg	ctccgaactg	ttctgctgaa	acaaaatcca	gtattgagct	aggttttagaa	120
tcgggtttgc	tggtcatctg	ggagaggcga	tccattcagc	ttcgaggcc	cccgaagatg	180
gcgttcgccc	gcacaaccca	gaagtgcag	gcatgtgaaa	agacggtcta	tttggttgat	240
caattgacag	ctgataatc	tgtttttcac	aaatcctgtt	tcgctgccca	tactgcaat	300
ggaactttta	agcttagcaa	ctattcgtcg	tttgagggag	ttctatattg	caaactcat	360
tttgaccagc	tgtttaagag	aacaggaagt	ttggataaaa	gttttgaaagc	cattcctaga	420
gcatcaagaa	atgacaagat	gcatgagaat	gagaacagga	cacctagtag	ggtatcagca	460
ttgttttccg	gtacacagga	taaatgtgtt	gcatgtggga			

<210> 1672
 <211> 301
 <212> DNA
 <213> Pinus radiata

<400> 1672
 ttgttggtgg gagacggaga acattgcttt gttaaattgg tcagcggggt tgcagctgaa 60
 tccgaggctg ttgcatcctt aaaagtgttt tacctttgtg gtttggacct tagggtttga 120
 actcttttaa gaaactctca aaatcagcct taaacaataa catacaagat gtccatttcta 180
 ccccaaagcg attccctcat aataagggaa gtttgggcag ataactctga ggaggagttt 240
 gctttgattc gggaaattgt ggacgattac ccttatattg ctatggatac tgagtttcct 300
 g 301

<210> 1673
 <211> 321
 <212> DNA
 <213> Pinus radiata

<400> 1673
 aacacaaata ccgtaaaatt gcagcgaaaa tccaaaattc caccatgggg actgtggcgg 60
 aagatggcag caagggttac aaggccgtaa atccccatcc caaaaagggc gtcgcctcgt 120
 ggctgggtgga catggtggag aaactggtgg ttgaaacttc tgcgttgat agttcgaaga 180
 agcctctgca ttttcttttg gggaacttcg ctccagtcct ggaaactgcc cccaaatcgc 240
 acctgcctgt tggtgggcaa ctccctagtt gcttggatgg agagtctgt cgcgttggtc 300
 ccaatccgaa attcgcaccg g 321

<210> 1674
 <211> 380
 <212> DNA
 <213> Pinus radiata

<400> 1674
 cctgttcgat atcactgctg aacctatcag ttgtccatta ccttcgcctg ccttgccctgt 60
 attgtcatca cagtcggcct ctgatcaaga agaagccgaa tcaggtgata attctgcaaa 120
 ttctgcagat gtagaaactc ttcttcctca gggttgatgaa acagcttctg ctgatctgac 180
 agtgttccca gggttttgta ccccttatgt accatacggg ttccccatat ggcacacttt 240
 tagaccaca ataactcaaa ctccaatgt ttataagcca acagctgtaa tgccaactgc 300
 tccaataaaa atggacgaat gcacagggtt atcccagtta agcctcggcg gtgttgacgc 360
 ggcttctgca atgaaacct 380

<210> 1675
 <211> 350
 <212> DNA
 <213> Pinus radiata

<400> 1675
 cccagctgag gctctctgag accaagggtga gattcagcca gtagtaagct atagattgat 60
 agttcagaga aaagactgaa aggcaaaaac tatatagaca taacaacgga gagagcagca 120
 caggaaccag gttgcataat ggctaggcct caaagatata gaggagtccg tcagaggcac 180
 tggggatcat ggtctctga aatccgccat cccttattga agaccagaat atggctagga 240
 acatttgaaa cagcagagga tgcagcacga gcatatgat aagctgcaag gatgatgtgt 300
 gggccgagag ctagaaccaa ctcccatc aatcccatgc acctccatct 350

<210> 1676
 <211> 262
 <212> DNA
 <213> Pinus radiata

<400> 1676
 aagtgaagctt catatctaac caataataac acctgtatag cttcacagca acagggcacc 60

atgggcccag	ctcttgctgt	gataaaatgg	gagtaaaaga	aaggcccctg	gactctaacg	120
aagataaaat	actggctcgac	tacattacca	aacatggcca	tggcaactgg	cgtgcactgc	180
ccaagcaagc	agggctcctg	cgatgtggaa	agaagttgtc	gcctgcgggg	gacgaattac	240
ctgaaacccg	acatcaaaag	ag				262

<210> 1677
 <211> 357
 <212> DNA
 <213> Pinus radiata

<400> 1677						
cgacaatggc	gcggaacggg	ttcgaaaccc	cgacgctcgg	cctcgaacgt	accgagggcg	60
tcgcccgcgg	agctggggga	agtgggtgtc	cgagattcgc	gagcctggga	agagaaagcg	120
catatgggtg	ggatccttcc	aaacggcaga	gatggcgggt	cgagcttacg	acgtggctgc	180
gctcagcctg	aagggaagat	ctgctttgcc	caatttcccg	gattccgtcc	acacgctgcc	240
gcgcccctct	tctctgaatc	ccagagatat	ccagcttggc	ggctgcccag	gcagccgcga	300
attaacgcag	ccgatgggtc	ctaccgatat	ttcatcctgc	aaccgcaaga	tcaaaat	357

<210> 1678
 <211> 354
 <212> DNA
 <213> Pinus radiata

<400> 1678						
cacgaggcag	tatctaccaa	tgctggggag	agacaggaag	cttggtgtgc	ttggtattcc	60
ttgggatgtc	gacactgaag	gtttacagga	ttatatgagc	aagtttggag	aactggatga	120
tgtgattggt	atgcgggatc	gtgcaactgg	tcgttctcgt	ggatttggtt	atgccacatt	180
ttcttcagtt	gaagatgcta	agaaagcact	tgacagtga	catgttctaa	atggtcgtac	240
actggaagta	aagggtggta	cacccaagga	ggagatgaag	gctccttcta	agaagattac	300
ccggatatatt	gnggcaaaga	attccccctt	ctgttacaga	ggatgcattc	cgaa	354

<210> 1679
 <211> 174
 <212> DNA
 <213> Pinus radiata

<400> 1679						
gtccgggccc	tgagagcat	cagccttggg	gttacagacc	aggaaaatac	aagatgggta	60
gatctccttg	ctgctccaaa	gaggggctca	accgcggggc	ctggaccaa	agggaggata	120
tgattctctc	cgaatacgtt	cgaattcatg	gcgatgggtg	atggaaaaat	gttg	174

<210> 1680
 <211> 221
 <212> DNA
 <213> Pinus radiata

<400> 1680						
gttcattaag	catggagcca	aagtcataat	cgcagacggt	gcggagaaa	ttggcaggaa	60
gcttgaggaa	tactttctc	ccgctgtggc	aacctacgtg	cactgcgatg	tgagcaaaga	120
agaagatgtg	agcgcggcgg	tgatgtggc	catggataag	tatggccaac	tgacattat	180
gtataacaac	gctggaacta	atgacagatt	tttgggtgaag	a		221

<210> 1681
 <211> 363
 <212> DNA
 <213> Pinus radiata

<400> 1681						
gcttaggcgc	attaaggagc	aaagggaagg	aaaatatcac	agcgacacag	caaaacagag	60
acagtcacaa	gaacaagccc	gaaggaaaaa	gatgtcccgg	gcacaggatg	gtatactgaa	120
gtacatgctg	aaaatgatgg	aagtttgcaa	agcacaaggt	tttgtatatg	gtatcattcc	180

tgaaaaaggg	aagcctgtaa	gtggagcctc	ggacaatctt	aaagcatggg	ggaaggagaa	240
ggtcagattt	gataggatg	gccctgctgc	aatcaccaaa	tatcaagcag	aacatgcaac	300
acctggagca	aatgagagta	acatgggtgt	ggctcctacc	cctcatactc	ttcaggaact	360
tca						363

<210> 1682

<211> 374

<212> DNA

<213> Pinus radiata

<400> 1682

ctgatttgaa	gtgctcattc	atgaacaatc	cgagcagcag	ttatgcataa	aatgttgatt	60
gcagggtctc	gttattgcca	gcaactaaag	ggcgatgggt	ttacaatcaa	atatcgagaa	120
cgagaatgaa	tctgaagcct	ctcggaatgc	tacaaattgg	taattttggc	cctgttagaa	180
gagcattctc	atcacctaga	gcctcagcag	atgaagaagc	tgctgcaaaa	gcagctgctg	240
ctgtagcaga	gacaggagcc	ccaaccatat	ttgacaagat	cataaagaag	gaaattccag	300
caactattgt	ttatgaggat	gcaaaagtgt	tggcatttcg	agatattaat	ccacaggcac	360
cagtccatat	attg					374

<210> 1683

<211> 407

<212> DNA

<213> Pinus radiata

<400> 1683

gccgtggctg	ttcccaggag	aggagagcct	cagctgtctc	gatctggcct	taaggggtta	60
cagaagaaga	atttcgaaga	tgggtagatc	ttcttgctat	tcaaagcaag	gtcatagccg	120
tgggatttgg	accctatgg	aggatatgat	tctctctgaa	tacattcgaa	ttcatggcag	180
tgatggatgg	aaaaatatcg	ctaaacgagc	aggtaaaatt	ctaatagcaa	tttttattgc	240
aaacgtaata	ctcattgaga	ggttaactaa	gcgggcagtt	tttgttctgc	aggctctaaa	300
cgacgtggaa	aggggttcag	attacgttgg	ttgaactatc	ttcgccccga	cattaaacgt	360
ggtaacattt	ctcctgatga	ggaggacctc	attattaggt	tgcatgg		407

<210> 1684

<211> 361

<212> DNA

<213> Pinus radiata

<400> 1684

gttccagacc	ttttgcatct	tcattattct	tccgcctgtg	aaaagatggg	gagatctccg	60
tgctgtgaga	aggctcatat	taacaaaggg	gcctggacta	aacaagaaga	tgaccgcctt	120
atcgctcaca	ttcgagccca	cggcgaaggg	ggctggcggt	ctcttcccaa	ggccgcaggg	180
ctgctgagat	gcggaagag	ctgcagactg	cgatggataa	actacctgcg	tcccgatctg	240
aagcgtggaa	gcttcacgga	agaagaagac	gaaactcatca	tcaaactcca	ctccttcggt	300
ggcaacaagt	ggtctttaat	tgcaggggaga	ttgcccggac	ggacggacaa	cgagataaag	360
a						361

<210> 1685

<211> 340

<212> DNA

<213> Pinus radiata

<400> 1685

caagagtaaa	cccgaaggaa	tagaagggga	aggaggcatc	ggcagcggtg	ttcctcctcc	60
tctcctctcc	tgcatctctc	aaactcaaat	acctctcctc	tcacaatcat	ggaaggcgga	120
gtcgtctttg	aatctgtgca	aaacccactg	gatcgccctga	acactggaaa	tatggaccat	180
ggttgtgccc	attacaggag	acgatgtcgg	attcgggccc	cttggttgcaa	tgagatctat	240
gattgtaggc	actgtcacia	tgaagccatg	agccatctaa	aggacccctt	gctgcgccat	300
gagctcccaa	aatacaaagt	tgaacgggtt	atttgggtctc			340

<210> 1686

<211> 332
 <212> DNA
 <213> Pinus radiata

<400> 1686
 ggctcttccc ggcagacctt gtaagccgac tactgtaaat ttattctttt agggttacag 60
 aagaagaaaa tacaagatgg gcagatctcc ttgctgctca aaagaagggc tcaaccgtgg 120
 ggcctggacc aaaagggagg atatgattct ctccgaatac attcgaattc atggcgatgg 180
 cggatggaga aatatgcccc aaagagcagg tcttaaacgg tgtggaaaga gctgcagatt 240
 acgatggctg aactatcttc gccccgacat taaacgtgga aacatttccc ctgatgagga 300
 ggaactcata attcggctcc atcgcttct tg 332

<210> 1687
 <211> 347
 <212> DNA
 <213> Pinus radiata

<400> 1687
 gattgatcaa acacaaatac cgtaaaattg cagcgaaaaat ccaaaattcc accatgggga 60
 ctgtggcgga agatggcagc aagggttaca aggcgtaaa tccccatccc aaaaagggcg 120
 tcgctcgtg gctgggtggac atgggtggaga aactgggtgt tgaaacttct gcgttgtata 180
 gttcgaagaa gcctctgcat tttcttttgg ggaacttcgc tccagtctcg gaaactgccc 240
 ccaaatacga cctgcctgtt gttgggcaac ttctagtgtg cttggatgga gagttcgtgc 300
 gccgttggtc ccaatccgaa attcgcaccg gtagctggct atcactg 347

<210> 1688
 <211> 354
 <212> DNA
 <213> Pinus radiata

<400> 1688
 cgataggcgt ggaagattta atgacataat ctgtaggaca tgcaacgagc cagggcatac 60
 cagtagggag tgcactggaa ttctcatctg ccacaactgt ggtggccgtg gacatgttgc 120
 atacgaatgc ccctctggtc gtgtgatgct gcgggacatg cgcaggcatt gatgctgcag 180
 tttctacacc accttgactt tttagattat ctgattttga caaatctatt ttgaatttgg 240
 aagttctttt tctgagtagt tagatcagta gacctgtcgt atcagttatt atacagtttt 300
 cttatactag tcctttactt caagactggc tgatatactt ctattttcat atga 354

<210> 1689
 <211> 348
 <212> DNA
 <213> Pinus radiata

<400> 1689
 ggagattcct ctctgcaaaa tgcgctggac ctgctcatg gttatctgag ccagattcca 60
 tcatatggtc atcggaagt tctagtcttg tattcagcac taagcacttg tgatccaggg 120
 gatatacatg aaagtataaa gaaatgcaag aattcgaaaa tgcgatgctc agtggttgga 180
 ttatctgcag aaattttatat ttgcaaacac ctctgtgagg agacgggagg attctattcc 240
 gtggcacttg atgagtcaca tttcaaggac ctctgtcttg aacattgccc tccaccacca 300
 gccatagcag agtttgagc tgctagcttg gtcaagatgg gatttcct 348

<210> 1690
 <211> 349
 <212> DNA
 <213> Pinus radiata

<400> 1690
 tgcataccat cattgtaatg gaggtgaaag gaataggagt gggattctta ttaagcaatg 60
 gaaggttacg ctgcgaataa cgatgcagaa ctctctgagca aaacccttca agtggaaacag 120
 aagttgttct atttcgatct caaggaaaac ccccagggtc aataccttaa aatctctgag 180
 aagacctccg gctcacggtc tacaataatt gtgccattg gtggagtgtc atggttctct 240

gatctcttta attattatgt cgacggagat gacgaggaag ttttgagcaa ggaattgcag 300
ctggatgccca aggtatttta tttcgatggt ggggtgaata aaaggggtc 349

<210> 1691
<211> 339
<212> DNA
<213> Pinus radiata

<400> 1691
ctgaagtgcc gtcgattggt cgggaggata gcgttttcga agttcgttgt tgagttatct 60
cgcgagactg tagaatttta ggggtgtttt ccacaaaccg acttttcccg acttcaaatac 120
ttgatattga agtgacatgg ccggcgagaa aagaaagatt aatagaatag ctaacgcttc 180
ggccaggcag gtcaccttcg cgaagaggcg gagggggctg ttcaaaaaag ctcaggagct 240
atcgatttta tgcgaagccg atgtagccct cctcgttttt tcttcaactg gaaagctgta 300
ccagtactcc agctccagca tgaaaatgat attggacca 339

<210> 1692
<211> 380
<212> DNA
<213> Pinus radiata

<400> 1692
gaaacatga gggctcttgcc acaaggtttg ttgagccaca acctgaatgg tcagtatttc 60
gtgaggcgag ctttggacat ggggaactta gagttgccaa tgcaacacat gcacattgga 120
gctggcatcg taatgatgat gatgagccag ttaaattctga tgaggtttgg atcaataatc 180
ttagccaatc aagagaatgt atagaaagta ccgactacag tggaaggaaa atactaattg 240
caccttgagt atatgcttgg agggagaagt gatctaactg taattgccaa ggcaaaacac 300
tgagtgtgag ctcattgcag gcaatgaatt tatggttcag tgtttagttg tatggaagta 360
tattattcat tagacatgca 380

<210> 1693
<211> 442
<212> DNA
<213> Pinus radiata

<400> 1693
ggatatcatc agctgtccag tttgtcctaa gagactacag aagaagaata tagaagatgg 60
gtagatcccc ttgcccccca aaagaagcgc ttaaccgtgg ggcttggaaca ggcattggagg 120
atacgattct caccgagtac attcgagttc atggcagtg tggttggaaca gatattctcca 180
aaagagcagg tcttaagagg tgtgcaaaga gttgcagatt gcgttggtctg aactatcttc 240
gtcccgatat taaacgtggg aacattttct cagaggaaga agagctcatt attcggttgc 300
atcgcttctc tggaatcgg tggtctctga tagcaggacg actgcctggg cgaacagaca 360
acgaaatcaa gaattactgg aacactcata tgagcaagaa gccatggctg tcaatggacg 420
aatctcagtc caatacttcg ca 442

<210> 1694
<211> 351
<212> DNA
<213> Pinus radiata

<400> 1694
tttttttttt tttttcctta ctcccacctt tttgttcgtc tgccgatggg tttgtatctg 60
atgtcaaaat tgtctgcaac gcatgctgat gttgattccc atgcccgaact acaacatctg 120
cacaaatagg aagttaagaa taaagcgaac aataaaaagt ccagccatta gcagtaaatt 180
ggcagatata cctcccgatg attattcgtg gaggaagtat ggacaaaagc caatcaaggg 240
ctccccacat ccaaggggct attataagtg cagcagcatg agaggttgct ctgcccggaa 300
acatgtggag cgggtgtccag atgaaccttc catgcttatt gtgacttatg a 351

<210> 1695
<211> 304
<212> DNA

<213> Pinus radiata

<400> 1695

caaggccgta	aatccccatc	ccaaaaaggg	cgccccctcg	tggtctggtgg	acatggtgga	60
gaaactggtg	gttgaaactt	ctgcgttgta	tagttccaag	aagcctctgc	atcttctttt	120
ggggaacttc	gctccagtct	cggaaactgc	ccccaatcg	cacctgcctg	ttggtgggca	180
acttcctagt	tgcttggtg	gagagtctgt	gcgcgttggt	ccaatccga	aattcgcacc	240
ggtagctggc	tatcactggt	ttgatggaga	tggaatgata	catggtctca	gaattaaaga	300
tggt						304

<210> 1696

<211> 371

<212> DNA

<213> Pinus radiata

<400> 1696

gcgtggatgt	acaacgaata	tggtatccata	gaggtcctgc	actttgggga	tttccctggt	60
ccaaagcctg	ggttaggcca	gctcttaatt	cgagtcggg	ccgctgctct	taatcctgcc	120
gactttaaga	gacggaaagg	cttattaaga	aacgcggatt	ccgattttcc	gactgtgcca	180
ggctgtgata	tgtcaggagt	ggtgggtggaa	attggtgatg	gtgtctccaa	gttcaaggcc	240
ggtgacgaga	tatacagcaa	catccagaat	ttcgcagcag	ggaggccaaa	gcagtgcggg	300
actctcgccc	agtacacagt	ggtggaggaa	ttcctggtag	cgccgaagcc	cagtaattta	360
tcatttgagg	a					371

<210> 1697

<211> 523

<212> DNA

<213> Pinus radiata

<400> 1697

ccttcattga	tatggtggag	ttgattcgcc	accatttgct	ggaagtggag	gacaatatag	60
atatagatat	tgatattgag	ggaacttcgc	cggtgttctt	cacccccact	gccattgaga	120
gtggcgatta	tattaatatt	gatgatcatg	acgatgatac	ccgagcaaat	gccagagcga	180
ccagggcctc	atgccaaaat	atcgtcagca	gaacaacatt	aaaagagaac	gcgaatgaat	240
ttacacaaca	gatccattct	tcatcttctc	caagatgctc	agttatgaaa	ggagcagagg	300
cgtttcagg	aaagcaacaa	ccacgggagc	gggagaatgg	aaagaagaga	gagacaagtg	360
ccagggaatt	caagaggagt	aggcggcgcc	cggtgggaaa	attcacagca	gaaatcagag	420
attccgcgcg	gaagggtgct	cggttttggc	ttggaaacttt	caacaccgtc	gaagaggctg	480
ctcatgcata	tgaccgcgct	gcctacagat	tcggtggagc	tcg		523

<210> 1698

<211> 471

<212> DNA

<213> Pinus radiata

<400> 1698

cgcgatagcc	gagagcaccc	ttatctcctc	cactctgttt	catacatgca	acaagctctg	60
gcagcagcaa	tgggggccca	gactatcatc	gctgcctcta	tgcatctctc	tctaacatta	120
tcaaatggcc	actatccgtt	tcagtccgag	ttcaaggggt	ccgtgggttcg	aatcccgag	180
agggcatttt	ccttcgcgcc	tgacggccgg	gcgctgaccg	tcgtcgcaga	ggccaagaag	240
gccgttgccg	tgctcaaagg	gaattcacag	gtcgaggggtg	ttgtcagtct	ctcgcaggaa	300
gacagcggtc	ccacaacagt	gaaggctcgt	ttgacaggac	tgactcctgg	gaagcatggc	360
tttcatctac	atgagtttgg	tgacacaacc	aatggctgca	tatcaacagg	agcacatttt	420
aatccaaaaa	aattgacaca	tggtgctcct	gaggatgatg	tacgccatgc	g	471

<210> 1699

<211> 483

<212> DNA

<213> Pinus radiata

<400> 1699

cttctcgttg	ttgttgctgt	gatttctctg	ccattctgtg	ttgggtttat	ggttttagct	60
tcactacaag	ccttttagcaa	gcctcacaaa	taagctttgc	agtaggatgt	ctcctcccc	120
gtcatattcc	atgtttccca	attcaggaat	gggtttaa	ccctcagtga	catcttcaga	180
accctctagt	caggtctccg	gatcgatccc	ccatcaatat	tcaggctccg	aggaagaccc	240
taaactgacg	atcgatgaaa	gaaagcagaa	gagaatgctt	tctaacagag	aatctgcaag	300
gaggtccagg	atgagaaagc	aacagcattt	ggatgaattg	agagccgaag	cagctcatct	360
cagagcagag	aacagtcata	tgctaacaaa	attcaacatt	gcttcacaga	aatacatgca	420
gctggaagaa	gagaattctc	ttctgagggtc	ctatgccatg	gatttaagcc	tcaagctgca	480
gtc						483

<210> 1700

<211> 442

<212> DNA

<213> Pinus radiata

<400> 1700

ttttttttga	atagaaaaaa	tataattagg	tacttttctt	tagaatgttg	cagataattg	60
cattttacttt	cctaagaagc	cattgtctaa	cttttagacca	tgatatgcag	ttactgcaaa	120
gatcttgaca	aacctaacca	atcacttata	cctactgtca	agtaaataatg	taacaaatat	180
caatttttcaa	tcaaagggtgc	cattaagagt	tttaaccaac	aagggtgaagg	caatgaatct	240
ctagatctca	ctaaccta	tctgctctac	ctaccaagct	agcagtctgg	cttgaaatta	300
gcagaacttc	caatgggttat	tacaatttac	acatgtcaca	aatgtagtca	taggttcac	360
tgactttctt	gtttgcaact	gatagtaagt	acacttccgc	tggccacatt	taccacactt	420
gaattgggtct	gttgtagctt	ta				442

<210> 1701

<211> 316

<212> DNA

<213> Pinus radiata

<400> 1701

ctaaattcat	atgctggaca	tacgtgatgt	catggcaggt	gttcttgctg	taaagaggaa	60
aagtttggcc	aaagatatct	atttcctaca	gaatgcagaa	ggttcaggtc	tggctccatt	120
tgactgttgg	ctatgcttgc	gagggatcaa	aacaatggct	ttgcgcattg	agaaacaaca	180
ggagaatgca	aggaaaattg	cagaattttt	gtcatctcat	cctctgattg	agaaagtata	240
ttatgctggc	cttccctagc	accaggcca	caattttacat	tttttgagg	caaaaggagg	300
aggttcagtt	cttagc					316

<210> 1702

<211> 329

<212> DNA

<213> Pinus radiata

<400> 1702

ataatgtcat	attttatata	cagagacttg	aactatttgt	atggttgaat	tcattattggt	60
tgacatgatt	gatatgtaca	tatgtttacat	ggtattagca	tgaggatggt	gatgtttgac	120
cttattttaag	tgttcgtagg	ttgtaaaaaa	aaaaaaaaaa	aactcgagac	tagttctcct	180
cgtgccgaat	tgggcacgag	ggaacagctg	aggaagagca	agaagagggtg	ttttgcgtgt	240
aacaggcggg	tggggctgac	gggctttaag	tgccgctgtg	gtgacctttt	ctgcgctcag	300
cacagggtact	ctgatatgca	tgactgctc				329

<210> 1703

<211> 325

<212> DNA

<213> Pinus radiata

<400> 1703

ctcgtgccct	ggtgcaaaga	ttgtttataag	aggcaagggt	tctgtcaagg	aaggtagatt	60
acagcaaaaa	cgtgatctga	aacctgatcc	atccgagaac	gaggacttgc	atgttttggt	120
tgaggcggag	acacaggatg	ctttggaaaa	agctgccggc	atgggtggaga	anctgcttat	180
gcctgttgac	gagggtttga	atgagcacia	gcggggcgag	ttgagagagc	ttgcggcact	240

taatgggaca atacgggatg atgaattctg caggctttgt ggtgaaccaa gtcataaggca 300
 atatgcttgc cctacaaggc ttata 325

<210> 1704
 <211> 453
 <212> DNA
 <213> Pinus radiata

<400> 1704
 cttagcgtct atagaagagc agggactaat tccatctttc tccatttcta tttctcttcc 60
 caatcaaac catggcgtct aacggacagc ttaatgcagg cactggctgt gttggtgatc 120
 tgaccaatgt tggagatcga cgattggagg ggaagggtgc aatagtaacg ggcggggcag 180
 cgggcatagg agaagccatt gttcagttgt tcattaagca tggagccaaa gtcataatcg 240
 ccgacgttgc ggagaaagct ggcagaaagc ttgagcaatc cctttcaccc gctgtggcaa 300
 cttacgtgca ctgcgatgtg agcaaagaag aggatgtaag cgcagcagtg gatgtggcca 360
 tcgacaagta tgggtcaactg gacattatgt ataacaacgc tggaaactaac gacagcgttt 420
 tgggtgaagag cgtagcagag tatgatatgg agt 453

<210> 1705
 <211> 242
 <212> DNA
 <213> Pinus radiata

<400> 1705
 gaaaagggtca attatcctgt gttgctacgg aaatctaaat attcaagggt atggtatatg 60
 ccagataaga ttttctttac tccaaaagct gtcatacaaac tggattttca ctgtcctgaa 120
 tcaaactgtt caccagaagc agtacttcta acttgtatatt ttactgcatt attggtggat 180
 tattttaaatg aatacgggtga ctataagtgg atacagtcatt aagatgagaa ttttactgga 240
 ga 242

<210> 1706
 <211> 358
 <212> DNA
 <213> Pinus radiata

<400> 1706
 gttttgggtt tctgttttta accttggaag gttcaatttt acagtttcta cgggaattct 60
 catattcaat ctgtttggca gattgaacta aagatttttg tccgggtgat ttttggatta 120
 aattcaaggc cgacgaacgt gaggtgctag ggcttttaga gtttggatgg aacctcatga 180
 catcgttggc aagtccaagg atgacgtctc gcttcccaaa gcaacctatg taaaattat 240
 aaaagagatg ctgcctccag atgttcgtgt tgcaagagat gctcaggact tactggctga 300
 gtgttgtgtg gagtttatca atctaataatc ttcagaatcc aatgaagttt gtggcaga 358

<210> 1707
 <211> 334
 <212> DNA
 <213> Pinus radiata

<400> 1707
 cgtttgcttg ccgtgaaaga aatcgaactt cgggcgcttg ggtgcgagaa atatttgcaa 60
 atcgaacttc cggcttgggt gcaagaagct tttgcgtttt cggtttcaga ttaaagcaat 120
 atggagtcag aggaagacaa aatatctcca gagaacaaga aaaggagatt aaaaacccca 180
 cagcaggtcg aaggtctaga gagcttttat gctgaacata agtatccttc ggaagctatg 240
 aaatcacagt tatcagaaga actgggatta acagagaagc aggtacaagg atggttctgt 300
 cacaggaggc ttaaggataa aaggctcatg aagg 334

<210> 1708
 <211> 288
 <212> DNA
 <213> Pinus radiata

<400> 1708
 gcatcggcag cgttggttcc cctcctctcc tctcctgcac ttctcaaact caaatacctc 60
 tcctctcaca atcatggaag gccgagtcgt ctttgaatct gtgcaaaacc cactggatcg 120
 cctgaacact ggaatatgg accatgggtg tgcccattac aggagacgat gtcggattcg 180
 ggccccttgt tgcaatgaga tctatgattg taggcactgt cacaatgaag ccatgagcca 240
 tctaaaggac cccttgctgc gccatgagct cccaagatca aaagttga 288

<210> 1709
 <211> 406
 <212> DNA
 <213> Pinus radiata

<400> 1709
 gttccccgct tcctccgtct gctaggcatt tctctgcgat tcttcttctt ctgctcgggg 60
 tctctctggt gaaatcgctc ccgcaggagg agggctgagg gcagggctcg gctcggctcg 120
 gttcggttct gcaggagtta tctcagggtt tttctcttgc tttctctgcg cttcggactc 180
 gggcttacag ttacagcatc tggaaaatgg cgtcacagga gagctcaaaa atgcaagagg 240
 aaggagtggt gagacaagtg ccggaagggc ccattcactg tttgaacaac tgcggcttct 300
 tcgggagcgc ggccaccatg aacttgtgct ccaagtgcta cagagagctt aacgccaac 360
 caccttcttt ttcttctcac ttgaaacctc agcaacctac gcttga 406

<210> 1710
 <211> 434
 <212> DNA
 <213> Pinus radiata

<400> 1710
 ccctcttcat catcgcaaaa ctcatattct cattcatcat ttggtggaac ctggccacaa 60
 cctagtgtac caacattgca tcttcccggg ggcagtcctc aagttggtct tcaagctagt 120
 cgcctccgag catcacttaa tgccagagat gtacctcttg aggaattgac cttagattcg 180
 gattgtgaag ggcaacttat aaatgatttt gcttctcttt caggatctgg aaacaccttg 240
 atgaggtctg gaaaatacaa gagtcatggc tgtagtattg ctccagttaa tcttgaggat 300
 ctatttgctt ctgagatgtc tcttagggga ccgtgccttg aaccttccgt gttttctcaa 360
 ataagttctc aaattcagtc acataaggca gctcaagttc agcctcagggt gcaaacatca 420
 attagtaatc agat 434

<210> 1711
 <211> 387
 <212> DNA
 <213> Pinus radiata

<400> 1711
 ttactttaca caccacctgg aaatgaagat cgtcacttgc tattcggtga tgagttacgt 60
 ggtcgcttag tgactcttct aggggggacgt gctgcagagg aagtggtata ctgaggtcgt 120
 gtttccactg gtgcacttga tgatataaag cgtgcaacag atatggcata caaagctgtc 180
 gctgaatatg gtcttaacaa gtccataggt ccaatttcat tggcgacttt gtctggtggc 240
 ggtcttgatg agtctggagg agcaatgccca tgggccaagg atcaggagaca tatggttagac 300
 cttgttcaaaa gagaggtgaa aattttgcta caatcggtt tgacaatggc actccttgtc 360
 atacgctcta atcccactgt acttgag 387

<210> 1712
 <211> 440
 <212> DNA
 <213> Pinus radiata

<400> 1712
 ctcttagcgt tctatagaag agcaaggact aattccatct ttctccattt ctatttctct 60
 tcccaatcaa aaccatggcg tctaaccggac agcttaatgc aggcactggc tgtgttggtg 120
 atctgaccaa tggtggagat cgacgattgc aggggaagggt tgcaatagta accggcgggg 180
 cagcgggcat aggagaagcc attgttcagt tgttcattaa gcatggagcc aaagtcataa 240
 tcgccagcgt tgccggagaaa gctggcagaa agcttgagca atccctttca cccgctgtgg 300

caacttacgt	gcactgcat	gtgagcaaag	aagaagatgt	aagcgcagca	gtggatgtgg	360
ccatcgaaaa	gtatgggtcaa	ctggacatta	tgtataacaa	cgctgggaact	aacgacagct	420
ttttggtgaa	gagcgtagaa					440

<210> 1713
 <211> 446
 <212> DNA
 <213> Pinus radiata

<400> 1713						
ggctcttccc	ggcagacct	gtaagccgac	tactgtaaat	ttattctttt	agggttacag	60
aagaagaaaa	tacaagatgg	gcagatctcc	ttgctgctca	aaagaagggc	tcaaccgtgg	120
ggcctggacc	aaaagggagg	atatgattct	ctccgaatac	attcgaattc	atggcgatgg	180
cgatgggaga	aatatgcccc	aaagagcagg	tcttaaacgg	tgtggaaaaga	gctgcagatt	240
acgatggctg	aactatcttc	gccccgacat	taaacgtgga	aacatttccc	ctgatgagga	300
ggaactcata	attcggctcc	ntcgcttct	tggcaatcga	tggtcgctta	tagcaggaag	360
attaccaggt	cgaacagaca	acgaaatcaa	gaactactgg	aacactcata	tgagcaagaa	420
gctgcttcca	ttgaacgaat	ctcaac				446

<210> 1714
 <211> 519
 <212> DNA
 <213> Pinus radiata

<400> 1714						
attcatttcc	gtgtaagttg	caacgcctca	ttgtttcctc	aacctagtga	gtaacattcg	60
tgaattcggt	atgcaagtag	cttgcggaag	ggcacttcta	tcattgttatt	cttattccga	120
gctactgtca	gctatatgat	ggacctgtgt	tttcatcact	ggctcacttc	acctgtttga	180
gtatctgcca	tttttggtatg	tttgtgtaag	cttgggctaaa	taccagagac	acaaagaaac	240
cgctctgtag	ccggagttat	cgaaactatt	tacaatgcca	cgggtgaaat	ttatttccag	300
gaacttcatg	gacatgggtg	cagcattacc	ggctgcaaag	ttagatcggc	tttatgatag	360
tcatttcaatt	tgcgaagcgg	ttctgaggtc	tctgactcct	gtgccaaaaga	aatatgtatt	420
gcaactatta	tatatgtacg	ttgcgggtgcc	tgccaaatca	ctggaggaat	gggttctttc	480
agatggcctg	tctaagcaca	aagcagcaat	tgataggtt			519

<210> 1715
 <211> 162
 <212> DNA
 <213> Pinus radiata

<400> 1715						
cggcccgagc	aattttgctt	ctctgctaaa	cgatgggaag	agcgccttgc	tgtgccaacg	60
gtgacagaag	caagggagcc	tggaccaagg	aagaggatga	caggcttacc	caatatattc	120
aggctcatgg	agaaggatgc	tggcggttctc	tccccagggg	cc		162

<210> 1716
 <211> 481
 <212> DNA
 <213> Pinus radiata

<400> 1716						
gttacagtag	tgcgtacaaa	attccagtag	cattgacttg	caatctactt	ttatggagta	60
ggtagggctc	cgtgaaattg	cgcatgtcat	gaatgtgctc	gtctgtaagt	ggctgcttta	120
cgccggcgaa	ggttcggacc	ctgtgggtgg	ggtgaattga	ctgtaagagg	ccgccgatct	180
cgatcgaagg	tgtacagaga	tcattaatgg	cgatgccgat	gccgttgctt	gtgaattgct	240
ctggctgtca	gacgccactg	cagctaccgc	cggggggcgaa	gtcgatacgc	tgtgctctgt	300
gtcaagcggg	cactcatgta	gcggaacatc	acggcgatat	tccgcctcga	ggttaccgcc	360
accagcagcc	attggctcct	cccgcgggtca	gtccccagca	ctattcgccc	gctccgcctt	420
cttcccacgg	caggaagaag	gcggtcgtct	gcggcatttc	ttacagatat	tcccagcacg	480
a						481

<210> 1717
 <211> 546
 <212> DNA
 <213> Pinus radiata

<400> 1717
 agaagtgcc actgcaaact ttgatttaca ccatgctcac tgtatacgaa acttgacgag 60
 ctgcactgtt tgcgggggata tgattccaaa aagtcgttct atggaacacc accaggatac 120
 ccatgctcct gtatcttggt cacagtgtgg cgaatccatt gaacgtgaat tactagtcac 180
 ccatgagcgt gacaagtgtc ttcatagaat tgttacatgt gggtattgag agtttccact 240
 gccagctgtt gatcttgata aacatctgaa catctgtggg aatagaacag agtattgtaa 300
 tccgtgcagc aagtatgtga gattgtgtga aaagctagct catgatttac agttccatga 360
 aggaaattct gatgacactg gggattcttc aagagagcag cacggggaaa ataatacacag 420
 ctaccacgca gcagaactgt ctcgagaggt tcctagggaa cggccacgag atacctcgca 480
 gcgtcggttg cttgtcacat tagcaatcac aggaattgcc ataattatag gatcatttgt 540
 tcttca 546

<210> 1718
 <211> 631
 <212> DNA
 <213> Pinus radiata

<400> 1718
 tataaccgcc tcttcttata ctagtgcctt tatcggttcc attcaaactt gctcacggat 60
 tccgaccctt ccggtctaaag ctgctgcatt tctgtgtgta ttgaagatgg ggagatctcc 120
 ctgctgtgaa aaagctcata caaacaagg ggctgggacc aaagaagagg acgatcgcct 180
 catcgccac attcgaaact acggcgaagg ttgctggcgc tcgcttccca aggccgcagg 240
 gctgatgcgc tgcgggaaga gctgcaggct ccgatggata aactacctgc gtcctgatct 300
 gaagcgtgga aacttctcag aagaagaaga cgaactcgct atcaaactcc actccctact 360
 cggcaacaag tgggtctctta ttgcaggcag attgcccggg cggacggaca acgagataaa 420
 gaactactgg aatactcaca tcaagagaaa attgctaaac aggggactcg acccccagtc 480
 ccattcgccc ctcgccagc cgcacaacag caacacgacc tgcccctctc tgcccgcct 540
 cgagcacgaa attcttgtgt tccagaggcc aagaacgccc gagatagcag atttctttca 600
 atacgagcgc tctgaaagct cgccgatgga a 631

<210> 1719
 <211> 561
 <212> DNA
 <213> Pinus radiata

<400> 1719
 gaacgaacgg tgaagatata cagaggatct ctcaacggct tcatctccgt cgtcgtctct 60
 cctccttcca tctccagcgt ccgatctgat cttatcaaag gaagccctta aatccctcca 120
 gctttccaag cgcgggttct gttgctgtat ccaggtccc tggatcatat gcggaagctg 180
 gcagcccggg cagccaggaa agtcctcggt ccggggaaca aagcccccag tccagcgtgc 240
 gggagcagga caggttctta cccatcgcca acattagccg catcatgaag aaggcgtgc 300
 cggccaacgg caagatcgct aaagacgcca aggagaccgt gcaggagtgt gtctcggaat 360
 ttatcagctt catcaccagc gaggccagtg acaaatgcc gcgagaaaag aggaagacaa 420
 tcaacggcga tgacttgctc tgggcatga gcacgctagg gtttgaagat tatatcgagc 480
 ccttgaaggt ttacttgctc atgtacagag aggcggaggg tgacaataag ggatcttcaa 540
 aatctggagt agaccaatat g 561

<210> 1720
 <211> 497
 <212> DNA
 <213> Pinus radiata

<400> 1720
 ttatttttgc gcatcgagag gcagcagcta cggactaatc gatccatcat agccattttt 60
 aatttcgctg cccaatcgaa ccatggagtc taaggacag gctaataccat ctgttgcttc 120
 tgtttgtaat ctacgaaga atggagagcg acgattggaa gggaaagttg ttatagtaac 180

gggcggggca	gcgggcatag	gagaagccat	tgttcagctg	ttcgcaaagc	acggagcgaa	240
agtcataatc	gcagacgttg	cagagaaagc	tggcagaaag	cttgcagaat	ccctttctcc	300
agcatcggca	acttatgtgc	actgtgatgt	cagcaaagaa	gaagacgtga	gcgcggctgt	360
ggatctggct	atggataagt	atggccaact	cgacattatg	tataacaacg	ctggaactaa	420
cgacagcttt	ctggtgaaga	gcgtggcaga	gtatgatatg	gagcaattcg	atcgagtgat	480
gaacgtaaac	gtgaaag					497

<210> 1721
 <211> 394
 <212> DNA
 <213> Pinus radiata

<400> 1721						
aataaattgg	gttgcaaagc	tttccagttg	tttgccagca	ttgaggtggc	tgagacttga	60
agaaagtgtg	caacaatttg	ctgtctttat	gttgtctcaa	gtcgatcttt	ccagagaagc	120
tgcacacttg	aaccgctttc	tttacaattt	tgcaggtggg	aaagatgtgt	catttcctaa	180
gcctttgtac	ccacttgtag	acccggcagt	tttgggtggag	acttatgaac	aaggcgagag	240
tgtggcacgc	tatgttgatc	agccagaagc	aaaccatagt	tttaatagat	cacttgctca	300
cactggcacg	catactctcc	tcaagatgct	actgggtggat	aatttcattcc	atgcagatat	360
gcatcctgga	aatatatttg	ttcgaatggg	acaa			394

<210> 1722
 <211> 394
 <212> DNA
 <213> Pinus radiata

<400> 1722						
taaggctaag	cagaccagag	gaggtgaagg	agaaaaaaga	aacaatggct	ggaataggac	60
cgattagtca	ggattgggaa	cccgttgtca	tcaggaagaa	ggctcctaac	gctgcagcca	120
agaaggacga	gaaggctgtc	aatgctgccc	gtcgaactgg	aggccctatt	gaaactatca	180
agaaatttaa	tgcaggatca	aacaaagcag	cctcgagcag	caccaccttg	aacaccaaga	240
agcttgatga	tgagacagaa	gttctcgctc	atgaaagagt	ttcatcagat	ttgaagaaaa	300
acataatgca	agcccgttta	gataaaaagt	tgacacaagc	ccagcttgca	cagcaaatca	360
atgaaaaacc	tcagattatt	caagagtacg	agtc			394

<210> 1723
 <211> 317
 <212> DNA
 <213> Pinus radiata

<400> 1723						
gattcttctt	cttctgctcg	gggtctctct	ggtgaaatcg	tccccgcagg	aggagggctg	60
agggcagggc	tcggctcggc	tcggttcggt	tcggcaggag	ttatctcagg	gtttttctct	120
tgcttttctg	cgcttctgga	ctcgggctta	cagttacagc	atctggaaaa	tggcgtcaca	180
ggagagctca	aaaatgcaag	aggaagggag	tgggagacaa	gtgccggaag	ggccatttca	240
ctggttgaac	aactgcggct	tcttcgggag	cgcgggccacc	atgaacttgt	gctccaagtg	300
ctacagagag	cttaacg					317

<210> 1724
 <211> 265
 <212> DNA
 <213> Pinus radiata

<400> 1724						
cggattccga	cccttcgggc	taaagctgct	gcatttctgt	gtgtattgaa	gatggggaga	60
tctccctgct	gtgaaaaagc	tcatacaaac	aaaggggcgt	ggaccaaaga	agaggacgat	120
cgctcatcgc	cccacattcg	aactcacggc	gaaggttgct	ggcgctcgct	tcccagggcc	180
gcagggctga	tgcgctgcgg	gaagagctgc	aggctccgat	ggataaacta	cctgcgtcct	240
gatctgaagc	gtggaaactt	ctcag				265

<210> 1725

<211> 284
 <212> DNA
 <213> Pinus radiata

<400> 1725
 caagagtaaa cccgaaggaa tagaagggga aggaggcatc ggcagcggtg ttctctctcc 60
 tctctctctc tgcatttctc aaactcaa atctctctc tcacaatcat ggaaggcgga 120
 gtcgtctttg aatctgtgca aaacccactg gatcgctga acactggaaa tatggaccat 180
 gggtgtgccc attacaggag acgatgtcgg attcggggcc cttgttgcaa tgagatctat 240
 gattgtaggc actgtcacia tgaaaccatg agccatctaa agga 284

<210> 1726
 <211> 308
 <212> DNA
 <213> Pinus radiata

<400> 1726
 caaaccgcca agtgagcttc atatctaacc aataataaca cctgtatagc ttcacagcaa 60
 cagggcacca tgggcccagc tccttgctgt gataaaatgg gagtaaagaa agggccctgg 120
 actctagacg aagataaaaat actggctcgac tacattacca aacatggcca tggcaactgg 180
 cgtgcactgc ccaagcaagc agggctcctg cgatgtggaa agagttgtcg cctgcgggtg 240
 acgaattacc tgaaaccgca catcaaaaaga ggaatttta gtccagaaga ggaagatcaa 300
 attattaa 308

<210> 1727
 <211> 338
 <212> DNA
 <213> Pinus radiata

<400> 1727
 gacgagcggg tggtcattaa gcatggagcc aaagtcataa tcgcagacgt cgcggagaaa 60
 gctggcagga agcttgagga atcactttct cccgctgtgg caacttacgt gcaactgcgat 120
 gtgagcaaa aagaagatgt gaccgcggcg gtggatgtgg ccatggataa gtatggccaa 180
 ctggacatta tgtataacaa cgctggaact aatgacagct ttttggtgaa gagcgtggta 240
 gagtatgata tggagcaatt cgatcgagtg atgaatgtaa acgtgaaagg agtgatgcac 300
 ggcattaagc accccgcccg cgttatgac cgcgggaa 338

<210> 1728
 <211> 350
 <212> DNA
 <213> Pinus radiata

<400> 1728
 gcacgaggtt ttaacatctt ttgttgatat ccagaggctt gatgatgtga aaaatgccat 60
 aacaccatct accaagggtt tgtattttga atctatctca aacccaactc tggcagttgc 120
 agacatccca tctctgtctg ccattgctca tgagaaaaat gtcaagggtg tgggttgataa 180
 taccttttct cccatgatca tatcccctgc aaagcttggg gctgatgttg ntattcacag 240
 catttcaaaa tatatcagtg gaggtgctga tgttatagca ggagcaatat gtgggacctgc 300
 agatctgata aattccatga tggatctcca tcagggaacc ttgatgctct 350

<210> 1729
 <211> 333
 <212> DNA
 <213> Pinus radiata

<400> 1729
 ccagtccatg gtttcaagtt agttagtcca ataaagcaga gatgggtcgt gctccatgct 60
 gcacaaaagt tgggtctcaac aaggagcat ggtctgccga agaggatagt cttctgggaa 120
 gatataattca aactcatggg gaaggcaatt ggaggtctct gcccaagaaa gcagggtctgc 180
 gaagatgtgg aaagagctgc agattgcgtt ggctaaacta tcttcggcca tgtatcaagc 240
 ggggaaatat tacaacagat gaagaagaac ttattatcag aatgcatgct ctcttgggca 300

accgatgggtc gataatagca gggagagtcc ccg

333

<210> 1730

<211> 508

<212> DNA

<213> Pinus radiata

<400> 1730

ctngtgccga	agaaatctga	atcgctcggt	tcgtgggtcga	caggaagcca	cagtgggcgg	60
cctgagaaac	tgggtgtggt	ggtcgggagt	gtcaagattg	tgacgggtggg	cggaccagcg	120
tctagtttgt	gttgggtggc	ggcattagaa	ggggcagagg	gggcttttca	gtgcatggga	180
ttatgggcaa	cgaaggcgcg	gcatcgatgc	ggctatgggg	cgacgataat	aattccatga	240
tcgaggcttt	catgggggaa	ctcgattact	cttactccac	cttctggaat	ggcatcgatg	300
ccaatccctc	ttcgctaccc	tcgcccgcga	cttcccgtcg	tctgccgcag	tgttgctatc	360
gccacgcctt	tcaatcagga	cacgctgcag	caacgcttgc	tggcggttgt	ggagggagcg	420
gctgagtgtc	ggacttatgc	catattctgg	cagttgtcga	gcgatgccag	cggcggctcg	480
gagcttgtct	ggggcgacgg	gtactaca				508

<210> 1731

<211> 411

<212> DNA

<213> Pinus radiata

<400> 1731

cggagtga	tcatttgctg	ccgtcactgc	tgccaagggt	tgttactgtt	agattttgtt	60
atancggaca	atggcttcaa	cagacataga	tatgattccc	gtgccctctg	gcgaggggtc	120
cagctctcaa	gcgggaccaa	gcgcttccac	caagaaggcc	aaacggttctg	aaatcaagaa	180
gtggaatgct	gtagcccttt	gggcgtggga	tattgtgggt	gataattgtg	caatttgcatg	240
aaaccacatc	atggacctct	gtattgagt	tcaggcaaat	caagcaagt	caacaagtga	300
agaatgtact	gttgcatggg	gtgtttgcaa	tcacgccttt	catttccatt	gcataagtgc	360
gtggctcaag	acacgacaag	tctgcccatt	agataataag	tgagtgggag	t	411

<210> 1732

<211> 390

<212> DNA

<213> Pinus radiata

<400> 1732

cgaaactcga	atcgatatgc	tttgtggccg	gttcaaatat	ttgagctggc	ttagcttctc	60
tgggttcagaa	atggcggact	aaagtaatag	tgtgccccga	ggctctgggt	tcgaatctcg	120
ttggcggtgaa	aggtcaaatt	tttctctcga	gtttcattga	ttctgaaaaa	ctggcatagc	180
tatggcgatg	agcaatggga	gattgtgtga	agatttggat	aggattaagg	ggcccgtgga	240
gccccgagga	ggacgcgtcg	ctgcagaggc	ttgttcagaa	atacgggccg	aggaactgga	300
ccctgataag	taaaggaatc	ccggggcgat	ccgggaaatc	gtgcaggcta	cgggtggtgca	360
atcagctgac	cctcaggtgg	agcacagacc				390

<210> 1733

<211> 277

<212> DNA

<213> Pinus radiata

<400> 1733

atttactgga	accattgttg	gaataagtga	tgctgaccc	gtgaactggc	cgaattcaaa	60
gtggagatgc	ctcaaggtag	aatgggatga	aatatcagca	attgcacgac	cagagagagt	120
ttccccgtgg	aaattagaac	cttcattaac	tccagtggca	gtgaatcctc	tgccagtagc	180
caggggcaag	aggcctcggc	caaatatatt	accttcatt	tccgatttat	cagtgcattga	240
caaggcccca	gtggattcta	ctcaggtgca	caggttt			277

<210> 1734

<211> 221

<212> DNA

<213> Pinus radiata

<400> 1734

gttgcagggg	aggggtgccc	tgatcacagg	aggcgccagt	ggaatcggag	aggctaccgc	60
caagttgttc	gtggagaatg	gagcgaaagt	agtgattgca	gaccttcagg	acgaccatgg	120
aaaccgtctt	gctcaatccc	tcgctcccaa	cgctgtcttt	ttccaactgcg	atgtctccaa	180
agaggcggac	gtttccgccc	tgctggactt	ggcgctggag	a		221

<210> 1735

<211> 316

<212> DNA

<213> Pinus radiata

<400> 1735

tgggctgttc	ccaggagagg	agagcctcag	ctgtctcgat	ctggcggttaa	ggggttacag	60
aagaagaatt	tcgaagatgg	ttagatcttc	ttgctattca	aagcaaggtc	ataggcgtgg	120
gatttgacc	cctatggagg	atatgattct	ctctgaatac	nttcgaattc	atggcagtga	180
tggatggaaa	aatatcgcta	aacgagcagg	tcttaaacga	tgtggaaaga	gttgcagatt	240
accgttggtt	gaactatctt	cgccccgaca	ttaaactgtg	taacatttct	cctgatgagg	300
aggacctcat	tattag					316

<210> 1736

<211> 464

<212> DNA

<213> Pinus radiata

<400> 1736

cagcatcggtg	gctcttccc	gcagacctag	taagccgact	actgtaaatt	tattctttta	60
gggttacaga	agaagaaaat	acaagatggg	cagatctcct	tgctgtctca	agaaggggt	120
caaccgtggg	gcctggacca	aaagggagga	tatgattctc	tccgaataca	ttcgaattca	180
tggcgatggc	ggatggagaa	atatgcccga	aagagcagg	cttaaactgg	gtggaaagag	240
ctgcagatta	cgatggctga	actatcttcg	ccccgacatt	aaactgtgga	acatttcccc	300
tgatgaggag	gaactcataa	ttcggtctca	tcgcttctct	ggcaatcgat	ggctcgcttat	360
agcaggaaga	ttaccagggt	gaacagacaa	cgaaatcaag	aactactgga	acactcatat	420
gagcaagaag	ctgcttccat	tgaacgaatc	tcaacccaag	actt		464

<210> 1737

<211> 361

<212> DNA

<213> Pinus radiata

<400> 1737

aaggaggcat	cggcagcgtt	gttcctcctc	ctctcctctc	ctgcatttct	caaactcaaa	60
tacctctcct	ctcacaatca	tggaaaggcg	agtcgtcttt	gaatctgtgc	aaaacccact	120
ggatcgccctg	aacactggaa	atatggacca	tgggtgtgcc	cattacagga	gacgatgtcg	180
gattcgggcc	ccttggttga	atgagatcta	tgattgtagg	cactgtcaca	atgaagccat	240
gagccatcta	aaggaccctt	tgctgcgcca	tgagctccca	agatacaaa	ttgaacgggt	300
tatttgttct	ctctgtgaca	ctgagcaaaa	tgtcaagcaa	gtttgcgaaa	actgtggtgt	360
t						361

<210> 1738

<211> 371

<212> DNA

<213> Pinus radiata

<400> 1738

gcttttctgt	ttcattcgat	ttcgattgtg	tagtgaagag	catggccgaa	caggtcttgg	60
aaggaggtca	gccagtggat	ctcgagaagc	atccttcagg	catcgttccc	accctccaga	120
atatagtgtc	cactgtaaac	ttggattgca	aattggactt	gaaagccatt	gctcttcaag	180
ctcgaaatgc	agagtacaat	cccaagcgtt	ttgcagcagt	cataatgaga	ataagggagc	240
ccaaaactac	agcactgata	tttgcatcag	ggaagatggg	ttgcacaggt	gcaaaaagtg	300

aacaacagtc aaaacttgct gcaagaaagt atgctcgtat tatccaaaaa ttgggctttc 360
ctgctcattt c 371

<210> 1739
<211> 589
<212> DNA
<213> Pinus radiata

<400> 1739
gtctcagggt aacgaaaatg gggaagggtga caatatggct gcatggctca ctggaataaa 60
cactcttcgc atccagccct tcaaacttcc gcctcttggc ccccatgatg cgaagggtgcg 120
catgaaggct gtgggtatct gtggcagtgca cgtccactat ttgaggacat tacggtgtgc 180
ggactttatt gtaaaagagc caatgggtgat tggatcatgag tctgctggaa taattgagga 240
ggttggcagt gaagtgaac atctgggtcc tggtagccgc gtagctttgg agcctggaat 300
atcgtgttgg cgttgtgacc aatgtaagcg aggtccctac aatttgtgtc ccgagatgaa 360
gttttttgcac acacctcccg tgcattggtc cttggccaat cagattgttc atcctgcaga 420
tttatgtttc aagttgccag ataatgtaag tctcgaggaa ggtgccatgt gtgaaccact 480
cagtgttggg gttcatgctt gtcgccgtgc ttctgtagge cctgagacaa atgtcttggt 540
aatgggggca ggtccatcgc gccttgtcac cgtgctgtct gcacgtgca 589

<210> 1740
<211> 473
<212> DNA
<213> Pinus radiata

<400> 1740
ctttgccgtg ttcgggttctg attcagggtt tcgggagctt gttgtgtggt gttctgcagg 60
tcaggacatt gtaggcctgg ttatacaaga tttcgaagca aactctcgga gcctcgaaga 120
atcggcgcaa atttcaacgg cttataaact atttgggaag cagtactctg gatttttctc 180
ccggaacgga tcggagtggt ggaagcgtaa taatcgccctg gaatttgtct tctgcaagat 240
aatattcaat taatctattg tcgaaggaaa tttgagccgt ataagaggat aatcaaaaga 300
agccgggtga tttctccggg attaaaggat ggatcaagaa aactggaaca tcggagctga 360
tggcactggc tgccaagctc cagaagggca cactctttgc gccataaact gcggcttttt 420
tggcagttcg gcaacgagaa acctgtgttc gaaatgttac agggatctga tta 473

<210> 1741
<211> 546
<212> DNA
<213> Pinus radiata

<400> 1741
atccaaataa tacaactatc tttgtgggtg gcttagaccc aactgtgaca gatgatatgc 60
tgagatcatt atttggtcag tttggagaac ttgtgcatgt caaaatacca gtgggaaaac 120
gttgtggatt tgttcagttt aataacaggg cttctgcaga ggaagcattg caaatgctgc 180
atggtacagt tcttggtcag caagccattc gtctttcctg gggacggagt cctgcaaaca 240
aacaaactgc tgggtgggtt caaccccaac aaccagatcc aaatcaatgg aatggagctt 300
attatgggta cggacaagga tatgatgcag gttatgggta tgcaccacaa cctcaggatc 360
ccaatatgta cagttatgcc ccttatgcat atggaaatta tcagcagcag taacatttac 420
ttgggttcag gctcttctgt ggacgtggaa atatgggttc attcatagag ctgtctctgt 480
aaacagttgt ttttaacggg catccagtca acctatctat attaaattta atgaagagga 540
aagtct 546

<210> 1742
<211> 348
<212> DNA
<213> Pinus radiata

<400> 1742
agcaacctac gcttgagcag ccgaatgcga agcaccatc gattccgctt ccctcggcgt 60
tgggtgccctc aagtagcgac gttccaatgg tggaagcagt agcagcagcg gagacggcca 120
ttggcaccgc tccatccagc tcggcagaac aggaggtgga gaaacatgaa caggacgagg 180

aggaacagct	gaggaagagc	aagaagaggt	gttttgcgtg	taacaggcgg	gtggggctga	240
cgggctttaa	gtgccgctgt	ggtgaccttt	tctgcgctca	gcacaggtag	tctgatatgc	300
atgactgctc	ttttgactac	aagactgccg	gccgcctcgc	cattctca		348

<210> 1743
 <211> 300
 <212> DNA
 <213> Pinus radiata

<400> 1743						
cgaccatgct	tcaagtgtctg	tcatgggtgtg	tgtgtcatca	gccccctcaa	ttatgntgct	60
catgaaggca	ggctatatattg	taggcatcat	agctctcaac	tttttaggga	gaaaggtaac	120
ttcagccanc	tttcaaaggc	aacacctaca	aaaggggtga	ctgataactc	agacacagac	180
nacaagtgat	cattcgggcc	agatttttgc	tgacagagtt	gtagtgtgtt	attgattcat	240
ttcatacatt	tgatatgcaa	gcctgtacaa	tatcctgtga	ctgttaaagg	cattcttttg	300

<210> 1744
 <211> 355
 <212> DNA
 <213> Pinus radiata

<400> 1744						
ggctcttccc	ggcagacctta	gtaagccgac	tactgtaaat	ttattctttt	agggttacag	60
aagaagaaaa	tacaagatgg	gcagatctcc	ttgctgtctca	aaagaagggc	tcaaccgtgg	120
ggcctggacc	aaaagggagg	atatgattct	ctccgaatac	attcgaattc	atggcgatgg	180
cggatggaga	aatatgcccc	aaagagcagg	tcttaaaccg	tgtggaaaga	gctgcagatt	240
acgatggctg	aactatcttc	gccccgacat	taaacgtgga	aacatttccc	ctgatgagga	300
ggaactcata	attcggtctcc	atcgcttctt	tggcaatcga	tggtcgctta	tagca	355

<210> 1745
 <211> 294
 <212> DNA
 <213> Pinus radiata

<400> 1745						
attgcttgaa	agagatgcac	gagcatcttc	aatttgcttg	tccagtgtgc	tccaaatctg	60
tctgtgatat	gtctaaattg	tgggagaaac	ttgaccgaga	ggttgctttg	actccaatgc	120
ctgaagctta	ccagaacaaa	atggtttgga	tcttatgcaa	tgatttggtg	gtaacttctg	180
aagtaaattt	tcacattgtt	gcacacaagt	gtcaaagttg	caattcttat	aacacccggc	240
agaccagggg	aggtccttct	gcaagttcat	gtagatctca	tctttgatat	tctc	294

<210> 1746
 <211> 316
 <212> DNA
 <213> Pinus radiata

<400> 1746						
aaccgcctct	tcttatacta	gtgcctttat	cggnnccatt	caaacttgct	cacggattcc	60
gacctttccg	gctaaagctg	ctgcatttct	gtgtgtattg	aagatgggga	gatctccctg	120
ctgtgaaaaa	gctcatataa	acaaaggggc	gtggaccaaa	gaagaggacg	atcgctcat	180
cgccacatt	cgaactcacg	gcgaagggtg	ctggcgctcg	cttcccaagg	ccgcagggtc	240
gatgcgctgc	gggaagagct	gcaggctccg	atggataaac	tacctgcgtc	ctgatctgaa	300
gcgtggaac	ttctca					316

<210> 1747
 <211> 263
 <212> DNA
 <213> Pinus radiata

<400> 1747						
gtggctgttc	ccaggagagg	agagcctcag	ctgtctcgat	ctggcgtaa	ggggttacag	60

aagaagaatt	tcgaagatgg	ttagatcttc	ttgctattca	aagcaaggtc	ataggcgtgg	120
gatttggacc	cctatggagg	atatgattct	ctctgaatac	attcgaattc	atggcagtga	180
tggatggaaa	aatatcgcta	aacgagcagg	tcttaaacga	tgtggaaaga	gttgcagatt	240
acgttggttg	aactatcttc	gcc				263

<210> 1748

<211> 145

<212> DNA

<213> Pinus radiata

<400> 1748

ttcggctcga	gaattgtggg	tgggagcccc	accggaggag	tganggaaac	tcaagagatg	60
ttggactttt	gtgcagagca	taacatcagt	tgcatgattg	aaaacattgc	aatggattac	120
cgtgaacaca	gcaatcgaac	gatta				145

<210> 1749

<211> 206

<212> DNA

<213> Pinus radiata

<400> 1749

ctgggtgtgaa	tcacatcgga	gatggcattc	gcaggaacac	agcanaagtg	caaggcatgc	60
gagaagacgg	tgtacgtggg	ggatcagctc	acagccgatg	gttcagtctt	tcacaaggcc	120
tgcttcggct	gccatcattg	caatggcacc	ttaaagctca	gcaactattc	ttcttttgaa	180
ggggtgctgt	actgcaaacc	tcactt				206

<210> 1750

<211> 263

<212> DNA

<213> Pinus radiata

<400> 1750

gttaaatttg	accccttcaa	tgcgttttat	ggttcagcct	ctatgttaat	ttgacacagt	60
gagctgaaat	attgcggctg	gatgtgtaca	ttcacgacta	tctcataaaa	cggaatcttc	120
ttgcatctgc	caagacattt	atgacggagg	caaaagtttc	tccagaacca	gtcgcaattg	180
atgcacctgg	aggctttttg	tttgaatggg	ggctctgtgt	ttgggatatt	ttcatctcac	240
ggacaaatga	gaagcactct	gag				263

<210> 1751

<211> 321

<212> DNA

<213> Pinus radiata

<400> 1751

ccaatatggg	ggcagatagt	atggttcctg	ttcacactcc	tgaagttatt	gagcattctt	60
ctacaaaagt	ttctattgat	acagctgggt	caatggatgt	ggatgcagca	tccaagtgc	120
atcacgttta	cagaactaca	tctctcaacc	actgtgtctc	ttcctccccc	atagatgttg	180
gaattgtacc	tgacagcaac	attacatctg	atatttcaac	accttaccat	gacccaagag	240
gagtattcga	gattcctcct	cgggttggtc	atcctggagg	ccaagggtgag	gtcatgggaa	300
gagaagcaag	agttctcaga	t				321

<210> 1752

<211> 316

<212> DNA

<213> Pinus radiata

<400> 1752

cggccccgagc	aattttgctt	ctctgctaaa	cgatgggaag	agcgcccttg	tgtgccaaacg	60
gtgacagaag	caagggagcc	tggaccaagg	aagaggatga	caggcttacc	caatatattc	120
aggctcatgg	agaaggatgc	tggcggttctc	tccccaaggc	cgcaggctctg	cttcgggtgtg	180
gaaaaagtgt	caggctgaga	tggataaatt	atcttcgccc	tgatctgaaa	cgaggagggtt	240

tttctgaaga tgaagacgat cttattctca aactgcacgc cctcctcgga aataagtggg 300
ctctgatagc gggtcg 316

<210> 1753
<211> 335
<212> DNA
<213> Pinus radiata

<400> 1753
attgagtaaa acttcattca gttggattct catcgttttc atggcttaca acccgcaaac 60
atgccgcgcg cgccaccagc ccggacagca gcctgggctc agacaacgag tccggcgggcg 120
gaggaggagg cggcgaggga gaagggcagt cgacgaagaa tggcaatggc aactacatta 180
gagagcagga tcgcctgctc cccatagcga acgtggggcg gataatgaag cggcgctgc 240
ggggaatgcg aaaatctcca aagacgcgaa ggagacggg caggaatgtg tgcggagtt 300
catcagcttc attaccggcg aggcctctga caagt 335

<210> 1754
<211> 349
<212> DNA
<213> Pinus radiata

<400> 1754
cacacagaag cttgtccgat ggcgatcacg caggggaaat ggctacaggt gaatcagaag 60
gaaggggggc caaaagcgcg gagctcccat gcagttgcag tgggtgggaaa aaaggcgat 120
gtgttcgggtg gagaggtgga gccgcgcgtg ccagtggaca atttgatgca tatcttggat 180
ctggaggaca attcctggtc cgtggcggat gccaaaggag aggcaccgcc tcccagagtg 240
ggggtcacca tgggtccctat cggctctggt atttatctct tcgggtggtcg agaccagcat 300
cacaaggagc tcaaccattt ctattccttc gatacnaatt cctgccagt 349

<210> 1755
<211> 289
<212> DNA
<213> Pinus radiata

<400> 1755
tcttaatgcc ctaaaggagc ccagcaagaa gatcgacggc cgcattgactg tcagtcagtt 60
ggcctctgct ggttcacagc ctgccagcc ggcggtgat gtatctgccc ggaaaatcta 120
tgtcgggaat gttcccatgg acatggcggc agatcgctg ctgagccttt tttctcagta 180
tggagagatc gaagaggggc cactaggggt tgataagcaa tcgggcangt caaggggttt 240
tgcgcttttt attttcaagt cangtggacg caactaagcg tgcgttga 289

<210> 1756
<211> 235
<212> DNA
<213> Pinus radiata

<400> 1756
agagtatgat cctgttgcta aaatttcaat cattcctcgt ggacaagctg gaggtctgac 60
attctttgct cctagtgaag agagactgga atctgggctt tacagcagaa gttaccttga 120
gaatcagatg gcagttgccc tcggtggaag ggtggcagaa gaagttattt ttgggaaaga 180
aaatgtcaca acaggagcat cgaatgactt cccacaagta tctcgtgttg cccgg 235

<210> 1757
<211> 457
<212> DNA
<213> Pinus radiata

<400> 1757
gtaggatgga aggcacgggt aagagattca aaggggaaggt ggcggtgggt accgcttcaa 60
cacagggcat aggatcgcc attgcacagc acctggcct cgaaggtgct tccgttgctg 120
tctcttcacg caaaaagaac aatgtagagg aagcagtgga aaagatgaga gccaaaggga 180

ttgatgttct	gggagtggcc	tgccatgttt	ccagtcgaga	acagaggagg	gatctcatcc	240
aaaagactgt	agataaatat	ggtcacatag	acattctggt	ctcaaatgca	gctgctaata	300
caactgtgaa	gcccattgtt	ttagttccag	agcctgtact	tgataaaatt	tgggagatta	360
atgtcaaggc	cactattctt	cttgtccagg	aagctgctgc	tcacttgtca	caagagtcac	420
caattatcat	aatttcatca	gttgctgctt	acagacc			457

<210> 1758

<211> 345

<212> DNA

<213> Pinus radiata

<400> 1758

catgtctttg	attcgggcaa	gcagacatgg	agtaagccta	tggtgaaagg	aaccccgccc	60
tctcccagg	acagccacag	ctgtaccact	gtgggaacaa	acttgtttgt	atttgggtggc	120
acagatggga	agaacctctt	acgggatttg	catatgctgg	acactactac	aaatacatgg	180
gtgcaacct	acgtaagtgg	tgaaggaccg	gcagctcgtg	aggggcacag	tgctgcactc	240
attgatcacc	gtctttttat	atttggaggt	tgtggaaaag	ttcaagatga	atctgaagag	300
atatattaca	acgaccttta	catactagac	acagttaact	taatt		345

<210> 1759

<211> 544

<212> DNA

<213> Pinus radiata

<400> 1759

gagcaaccca	cattgcattg	attgcactac	agtttcagcg	attttcaggt	catctcaggt	60
gtgcagctta	agcttattct	cttgaaaata	tggtcgagga	aggagagaag	gtcatggtaa	120
acgtttatga	tctaagccaa	ggacttgctc	gtcaactctc	aactactttt	cttggaagaa	180
ccattgaagg	aatttggcat	accggtgtgg	tagtttatgg	gaaggagtat	tactttgggg	240
gtggtattca	acacagccct	acagggcaaa	ctccatatgg	aaaaccgtgg	aaagtgggtg	300
agttgggtgt	cactcacgtt	ccgatggaaa	tgtttgaaga	attcctggaa	aaaataagcc	360
ctcgctatac	agctttaaaca	tatagtgttg	tgaccataaa	ctgtaacaac	ttcagcgatg	420
aggttgcaca	gtttttgggt	ggctgcaaca	tcccagattt	catccttagg	ctcccaacaag	480
aagtgatgaa	cagcccaatg	ggccctttaa	taatgcccac	gataatgcag	tttgaagcta	540
ctct						544

<210> 1760

<211> 375

<212> DNA

<213> Pinus radiata

<400> 1760

cgatagccga	gagcaccctt	atctcctcca	ctctgtttca	tacatgcaac	aagctctggc	60
agcagcaatg	gcgccccaga	ctatcatcgc	tgccctctatg	gcattctctc	taacattatc	120
aaatggccac	tatccgtttc	agtcaggatt	caaggggtcc	gtgggttcgaa	tcccgcagag	180
ggcattttcc	ttcgcgcctg	cagcccgggc	gctgaccgtc	gtcgcganagg	ccaagaaggc	240
cgttgccgtg	ctcaaaggaa	attcacaggt	cgagggtgtt	gtcaatctct	cgcaggaaga	300
caacgggtccc	acaacagtga	aggtccgttt	gacaggactg	actcctggga	agcatggctt	360
tcacttacat	gagtt					375

<210> 1761

<211> 333

<212> DNA

<213> Pinus radiata

<400> 1761

tttatatttt	tacaatccga	ggttgccagg	actttcagag	aggtcgatac	cgtggaaaag	60
actgagattg	acggatcgat	tgcaatggcg	tttgccgaag	agtattccga	tcgcgatgcc	120
gtatttcaaa	agctgaaggc	gaagtctgaa	aacaagattt	gttttgattg	caatgctaaa	180
agtcccagtt	gggccgtccg	tgacatatgg	agtattcatt	tgtcttgatt	gttcagcaat	240
gcatcggagt	cttggtgttc	atgtcagttt	tggagggtcta	caaatctcga	tacatgggacc	300

atgggagcagt tgaaattgat gagctttggt ggt

333

<210> 1762

<211> 331

<212> DNA

<213> Pinus radiata

<400> 1762

ctcgtgcccg	actataggcc	gcaccaccct	cagccgtttc	ttctttgcct	ctctttcttct	60
tgtgggcat	gtgacctatg	gcctattcat	tttctgcact	ggatctgaga	gcgaggggga	120
agttaacgag	agccctggct	ccacgaattt	tgaaggcggc	gcggnccat	gcgagagcag	180
cctcttcggc	ggtgatgaaa	gngccgagcc	aaactctggt	cctcttggcg	gggtctctga	240
tttcagctgc	gaatttacc	cacggccgct	gccggactcc	tctgtagcgc	ctagctccgc	300
tcactgtgct	catctctcca	ctctgctctt	c			331

<210> 1763

<211> 568

<212> DNA

<213> Pinus radiata

<400> 1763

ccggccgccc	cctccgacct	gcctgatgga	acacagtggc	gctacagcga	gttcttgaac	60
gccgtgaaga	agggtaaggt	ggagcgcgtc	cgttccagca	aggacggcag	ctacctccaa	120
ctgagcgccg	tcgatgggag	gcgtgccact	gtaaccctgc	caaacgaccc	ggacctgggtg	180
gacatccctg	cgatgaatgg	tgtggacata	tcgggttccg	agggggaggc	gagcaatggc	240
ctcctcagcg	taatcggtaa	tcttttattc	ccaattttag	ccttcggggg	tttattcttc	300
ttatttcggc	gggctcagg	aggccctggg	ggccccggag	gtttgggcgg	ccctatggac	360
ttcggtcgct	ctaagtccaa	gttccaggag	gtgccggaga	ctggagttac	atttgccgac	420
gtggcaggcg	ctgaccaggc	caagctggag	cttcaggagg	tggtggattt	cttgaaaaac	480
cctgataagt	atactgccct	tggtgccaag	atcccccaag	gatgcttgtt	ggtaggtccg	540
ccggggacgg	gcaagactct	actggccc				568

<210> 1764

<211> 351

<212> DNA

<213> Pinus radiata

<400> 1764

gagaaggaag	ctgctcttgc	tgccacacca	ccagaagatg	ataaacctac	aatatttgac	60
acaatactgc	agaaggagat	tcccagtaca	gtggtttacg	aggatgagaa	ggtaacttgca	120
ttcagggata	tcgcacccca	agcacctact	acatcattat	catccccaaa	gtaaggggatg	180
gcttgactgg	cctatctaag	gcagaagaga	ggcatgagga	tatttaggtc	acctgctata	240
cactgcaaaa	gttattgcaa	agcaggaagg	tttatctgat	ggcttcagaa	ttgtcattaa	300
cgatggctct	actggatgcc	aatctgtgac	catttacata	ttcatctact	c	351

<210> 1765

<211> 462

<212> DNA

<213> Pinus radiata

<400> 1765

tgtaaattta	ttcttttagg	gttacagaag	aagaaaatac	aagatgggca	gatctccttg	60
ctgctcaaaa	gaagggtca	accgtggggc	ctggacaaaa	agggaggata	tgattctctc	120
cgaatacatt	cgaattcatg	gcgatggcgg	atggagaaat	atgccccaaa	gagcaggtct	180
taaacggtgt	ggaaagagct	gcagattacg	atggctgaac	tatcttcgcc	ccgacattaa	240
acgtggaaaac	atttcccctg	atgaggagga	actcataatt	cggctccatc	gccttcttgg	300
caatcgatgg	tcgcttatag	caggaagatt	accaggtcga	acagacaacg	aaatcaagaa	360
ctactggaac	actcatatga	gcaagaagct	gcttccattg	aacgaatctt	aaccagact	420
ttgctgtcc	ccaaaaagag	gtcgcaatct	tcttctccct	gc		462

<210> 1766

<211> 532
 <212> DNA
 <213> Pinus radiata

<400> 1766
 gtaaaaaatga ccacggcgtg gacttctgga acnccccgga gcgttcagga tggttgatga 60
 agcagggcga gtacatcaaa acatggaggc gcagatgggt tgttctaaag cagggaaaagc 120
 tcttctgggt caaggaaaat tacatcaciaa gggattctaa tccccgtggg gttgttccgg 180
 tgagcacctg cctgactgtc aagggagccg aagacgtcct caacaagcca ttcgccttcg 240
 agctctcgac gagcagagag accatgtact tcatcgcaga cagcgataag gagaaggagg 300
 agtggatcaa ttccatcggc cgctccatcg tacagcattc caggtcagtt acagacaagg 360
 agatcgntga ttatgatagc cagcgtgccg ataaatgaat acccaattcg aatcggtgg 420
 attcgctgta aattggttgc aattaggggt tctaggggtt tcttttgaat tttgtgatgg 480
 aacgccttaa atcggttgtc cattgcattt ctaggatgaa tcttaataaa tt 532

<210> 1767
 <211> 354
 <212> DNA
 <213> Pinus radiata

<400> 1767
 aaccgcctct tcttatacta gtgcctttat cggttccatt caaacttgct cacggattcc 60
 gacccttccg gctaaagctg ctgcatttct gtgtgtattg aagatgggga gatctccctg 120
 ctgtgaaaaa gctcatacaa acaaaggggc gtggacaaaa gaagaggacg atcgctcat 180
 cgccacatt cgaactcacg gcgaagggtg ctggcgctcg cttcccaagg ccgcaaggct 240
 gatgcgctgc ggggaagagct gcaggctccg atggataaac tacctgcgtc ctgatctgaa 300
 gcgtggaaac ttctcagaag aagaagacga actcgtcagt aaactccact tcct 354

<210> 1768
 <211> 430
 <212> DNA
 <213> Pinus radiata

<400> 1768
 cttcgacggc gcgatagccg agagcacctt tatctcctcc actctgtttc atacatgcaa 60
 caagctctgg cagcagcaat ggcgccccag actatcatcg ctgcctctat ggcatctcct 120
 ctaacattat caaatggcca ctatccgttt cagtccgagt tcaaggggtc cgtgggtcga 180
 atcccgaga gggcattttc cttcgcgctt gcagcccggg cgctgaccgt cgtcgagag 240
 gccagaagg ccggttgccg gctcaaaggg aattcacagg tcgaggggtg tgtcagttct 300
 tcgaggaag acagcgggtc cacaacagtg aagggtccgt tgacaggact gactcctggg 360
 aagcatggct ttcacttaca tgagtttggg gacacaacca atggctgcat atcaacagga 420
 gcacatttta 430

<210> 1769
 <211> 407
 <212> DNA
 <213> Pinus radiata

<400> 1769
 gaacgaacgg tgaagataga cagaggatct ctcaacgggt tcatctccgt cgtcgtctct 60
 cctccttcca tctccagcgt ccgatctgat cttatcaaag gaagccctta aatccctcca 120
 gctttccaag cgcggtttct gttgctgtat cccaggtccc tggatcatat gcggaagctg 180
 gcagcccggg cagccaggaa agtctcgtt ccgggggaaca aagccccag tccagcgtgc 240
 gggagcagga caggttecta cccatcgcca acattagccg catcatgaag aaggcgtgc 300
 cggccaacgg caagatcgct aaagacgcca aggagaccgt gcaggagtgt gtctcggaat 360
 ttatcagctt catcaccage gaggccagtg acaaatgcca gcgagaa 407

<210> 1770
 <211> 347
 <212> DNA
 <213> Pinus radiata

<400> 1770

cagactttttg	ctccgaactg	ttctggtgaa	acaaaatcca	gtattgagct	aggttttagaa	60
tcggggtttgc	tggtcatctg	ggagaggcga	tccattcagc	ttcgcaggcc	cccgaagatg	120
gcgttcgccg	gcacaacca	gaagtgcgaag	gcatgtgaaa	agacgggtcta	tttggttgat	180
caattgacag	ctgataattc	tgtttttcac	aaatcctggt	tcgctgcca	tactgcaat	240
ggaactttta	agcttagcaa	ctattcgtcg	tttgaggag	ttctatattg	caaacctcat	300
tttgaccagc	tgtttaagag	aacagggaagt	ttggataaaa	gttttga		347

<210> 1771

<211> 469

<212> DNA

<213> Pinus radiata

<400> 1771

cgatagccga	gagcaccctt	atctcctcca	ctctgtttca	tacatgcaac	aagctctggc	60
agcagcaatg	gcggcccaga	ctatcatcgc	tgccctctatg	gcatctcctc	taacattatc	120
aaatggccac	tatccgtttc	agtcgaggtt	caaggggtcc	gtggttcgaa	ttccgcaaag	180
ggcattttcc	ttcgcgcctg	cagcccgggc	gctgaccgtc	gtcgcagagg	ccaagaaggc	240
cgttgccgtg	ctcaaaggaa	attcacaggt	cgagggtggt	gtcaatctct	cgcaggaaga	300
caacgggtccc	acaacagtga	aggtccggtt	gacaggactg	actcctggga	agcatggctt	360
tcatctacat	gagtttggtg	acacaacca	tggtctgcatc	tcaacaggag	cacattttta	420
tccaaaaaaa	ttgacacatg	gtgctcctga	ggatgatgta	cgccatgcg		469

<210> 1772

<211> 461

<212> DNA

<213> Pinus radiata

<400> 1772

tcttaccctt	ttcctgagcc	accgagaatt	tcctctccgg	aataccact	tctcagagat	60
tcttgctgcg	aactctgttt	tcttcagcga	gatttgctcag	tgaattgtga	ggagtattga	120
gtcttatcat	gcggatccag	tgcatgcct	gcgagcaggc	aactgcttca	gtgatatgtt	180
gtgcagacga	ggctgctctg	tgcaagggaat	gtgatataaa	agtcacaaag	gccaacaagc	240
ttgccagcaa	acacaagaga	ttatctctcc	tcgaaacttc	tcgaaagctc	tctcgctgcg	300
acatttgcca	ggatagggcc	gccatcggtt	tctgtctcga	agatcgtgct	atgctgtgcc	360
aagactgcga	tgagtccgtt	cattctcgcg	acacattagc	agcaaaacac	caaagggtcc	420
tgggccactgg	cattagggta	ggtctcaatg	cctgtcatc	a		461

<210> 1773

<211> 332

<212> DNA

<213> Pinus radiata

<400> 1773

gacaatatgg	ctgcatggct	cactggaata	aacactcttc	gcatccagcc	cttcaaactt	60
ccgcctcttg	gcccccatga	tgcaagggtg	cgcatgaagg	ctgtgggtat	ctgtggcagt	120
gacgtccact	atttgaggac	attacgggtg	gcggacttta	ttgtaaaaga	gccaatggtg	180
attggtcatg	agtctgctgg	aataattgag	gagggtggca	gtgaagtga	acatctgggt	240
cctgggtgacc	gcgtagcttt	ggagcctgga	atatcgtggt	ggcgttgtga	ccaatgtaag	300
cgaggctcct	acaatttggtg	tcccagagatg	aa			332

<210> 1774

<211> 322

<212> DNA

<213> Pinus radiata

<400> 1774

ctcctgtgca	gcgtacgcct	tcgcctttgc	gatttcgagc	cccattggaa	ttgccattgg	60
aataacttatt	gacgccacta	cagagggccg	agtggcagac	tggatttatg	caatctcaat	120
gggttttgcg	tgcggtgttt	tcgtttatgt	tgccatcaac	catcttctga	tgaaaggatt	180

aatacagaac	cctctgaaag	gtgtgattcg	ctttgacaaa	cccttttaca	aatatttggc	240
tgtactcact	ggagctggac	tgattgcagt	ggtaatgatt	tgggacacct	agtggtaatg	300
aattgggaca	cttcttagct	gc				322

<210> 1775
 <211> 428
 <212> DNA
 <213> Pinus radiata

<400> 1775						
gagagagaga	gagagagaga	gagagagaga	gagagagact	cnngccgant	tcgnnacnag	60
cgaagccngt	ttccaaanat	ggatngggag	aaactcatga	agatggctgg	tgacgtccgc	120
actggcggaa	aggggtacaat	gcgaaggaaa	aagaagacaa	ttcataagac	tgccacggca	180
gatgacaaga	gacttcaaag	taccttgaaa	agaataggcg	tgaataacat	ccctgctatt	240
gaagaagtca	atatttttaa	ggatgaccat	gttattcatt	ttgctaacc	aaaggtccag	300
gcttctattg	ctgccaacac	atgggtgggt	agtgggtcat	cgcaacaaa	aaaacttcaa	360
gatcttttcc	ctggtatcat	caatcagctt	ggaccagaga	gttttgccaa	tctgaggaag	420
attgcaga						428

<210> 1776
 <211> 512
 <212> DNA
 <213> Pinus radiata

<400> 1776						
ataaaaccct	aaatctctgc	actcgccagc	tacgatttat	tctgcctcca	gcattttggt	60
ccttaccagt	ttgggcctct	ttttgcggtt	tctacacata	gccgctgcga	ttctggggag	120
tttctttggc	ttagattttt	ggggtaaaat	tctgggtatt	gtggtttgct	cacactaatt	180
atcctgtcat	ggatcatcaa	cagcagcagt	ggatgatgca	gcaacaaaact	caacaacagt	240
atcagcagcc	gcagtattcg	aatgacgaaa	tccggacact	ttggatcggg	gatttgcagt	300
attgggtcga	tgaaaattat	ctccatactt	gcttttcgca	aaccggagag	gttgtgtcta	360
taaaggtgat	tccggaacaag	gctacaggct	atccggaagg	ttatggtttt	gtggagttta	420
tttcccatgc	agcagctgag	aggattcttc	aaacatacaa	tggtacacag	atgcctggca	480
cagagcaact	ttatagatta	aattgggctt	cc			512

<210> 1777
 <211> 498
 <212> DNA
 <213> Pinus radiata

<400> 1777						
ggatggaagg	cacaagtaag	agattcaaag	ggaaggtagc	ggtggtgacc	gcttcaacaa	60
gggcataggg	ttcgccattg	cagagcgctt	tggcctcgaa	ggcgcttccg	tcgtcgtctc	120
atcacgaaaa	cagaaaaatg	taggggaagc	agtggaaaaag	ctgagagcca	aagggtattga	180
tggtctggga	gtggcttgcc	atgtttccag	tcgagaccag	aggagagatc	tcatccaaaa	240
gactgtagat	aaatatggtc	gcatagacat	tctggtctca	aatgcagctg	ctaattccaac	300
tgtggacccc	attgtttcgg	ttccagagcc	tgtaattgat	aaactttggg	agattaacgt	360
caaggccact	attcttcttg	tccaggatgc	ttctgctcac	ttgtcacaag	agtcatacat	420
tatcataatt	tcgtcaatta	ctgcttacag	gccagaggca	atgatggcca	tgtatggggg	480
taccaagact	gctctttt					498

<210> 1778
 <211> 435
 <212> DNA
 <213> Pinus radiata

<400> 1778						
ggcgacacat	ggcccgtgtc	aggcgccctg	agaggccaca	agcgtgcaat	tctatgcttg	60
gcgagtgttg	cagaattttt	atgcagtggg	tccggcgata	atactattag	aatgtggaaa	120
agggggagaag	gaaacaggca	ttactgtttg	gcgggttttag	aaggtcacag	aggacctgtt	180
aagtccatcg	cagtgtcttt	agacactgtg	aggggatgcc	acgtctacag	cggaaagcctg	240

gatcatgaca	ttaagggtttg	gcgggttagt	tcaaataaaa	gcagttccga	cgatcatgcc	300
gaggtgcca	accataacaa	tcgcttgaaa	accatacact	cccctgagga	aagcgttttt	360
cattcaaggc	aaattttttg	tatttcatga	aactgatgta	gccatctacg	tgtcaactaa	420
ctacaatatg	cctgt					435

<210> 1779
 <211> 470
 <212> DNA
 <213> Pinus radiata

<400> 1779						
gccatggctg	catttcgcag	ggttctgttg	ctgtatccca	ggtccttggt	catatggcgg	60
aagctggcag	cccgggcagc	caggaaagtc	ctcgttccgg	ggaacaaagc	ccccagtcca	120
gcgtgcggga	gcaggacagg	ttcctaccca	tcgccaacat	tagccgcac	atgaagaagg	180
cgctgccggc	caacggcaag	atcgctaaag	acgccaaagga	gaccgtgcag	gagtgtgtct	240
cggaaatttat	cagcttcac	accagcgagg	ccagtgcaca	atgccagcga	gaaaagagga	300
agacaatcaa	cggcgatgac	ttgctctggg	ccatgagcac	gctagggttt	gaagattata	360
tcgagccctt	gaagggtttac	ttgctcatgt	acagagaggc	ggagggtgac	aataagggat	420
cttcaaaatc	tggagtagac	caatatggaa	agaaagagtc	aaatgtacat		470

<210> 1780
 <211> 359
 <212> DNA
 <213> Pinus radiata

<400> 1780						
attcgttctg	tccaacaaca	gcgaagccga	tttccaaaga	tggataggga	gaaactcatg	60
aagatggctg	gtgcagtcg	cactggcgga	aagggtacaa	tgcgaaggaa	aaagaagaca	120
attcataaga	ctgccacagc	agatgacaag	agacttcaaa	gtaccttgaa	aagaataggc	180
gtgaataaca	tccctgctat	tgaagaagtc	aatattttta	aggatgacca	tgttattcat	240
tttgctaacc	caaagggtcca	ggcttctatt	gctgccaaaca	catgggtggt	tagtgggtca	300
tcgcaaaca	aaaaacttca	agatcttttc	cctggtatca	tcaatcagct	tggaccaga	359

<210> 1781
 <211> 360
 <212> DNA
 <213> Pinus radiata

<400> 1781						
cggcccagc	aattttgctt	ctctgctaaa	cgatgggaag	agcgccttgc	tgtgccaacg	60
gtgacagaag	caagggagcc	tggaccaagg	aagaggatga	caggcttacc	caatatattc	120
aggctcatgg	agaaggatgc	tggcgttctc	tccccaaggc	cgcaggctctg	cttcgggtgtg	180
gaaaaagttg	caggctgaga	tggataaatt	atcttcgccc	tgatctgaaa	cgaggaggtt	240
tttctgaaga	tgaagacgat	cttattctca	aactgcacgc	cctcctcgga	aataagtggg	300
ctctgatagc	gggtcgtttg	cctgggtcgaa	ctgacaacga	gatcaaaaac	tactggaact	360

<210> 1782
 <211> 141
 <212> DNA
 <213> Pinus radiata

<400> 1782						
cttctgtgga	ttttatcaag	aactctttaa	ctagtgttga	tgatgataaa	ggttcttttg	60
caccaacaaa	tttcattgag	caggctgatg	aattgatccg	aaaagagctg	gtgtcattac	120
tagagcacga	caatgcaaaa	t				141

<210> 1783
 <211> 370
 <212> DNA
 <213> Pinus radiata

<400> 1783
 atttgagtgg ggtgttttca ctagcagaag cagcaaggctc agtttttccac tacagtactg 60
 caacttcctc ctattttccca cctcctcaag cttacccttc tgacttcagt tcccatcctg 120
 tgaatccacc atccaaacag ctcaatgaca caaccagatt agcccaagca ttgttctgat 180
 aattataatc ctgacagtta tattttttct ctctgcattg cttcacgttt taatcagata 240
 cttggcaaga tctcccaata gagactccaa cagctcaggg gccataggtg caatcgaagg 300
 gcaactgcag cagctgtttc atctccatga cgcaagggtt gagcaggcct tcattgatgc 360
 attaccagtc 370

<210> 1784
 <211> 381
 <212> DNA
 <213> Pinus radiata

<400> 1784
 tggttttgat ttgagtagcg ggtttataag tccgggattt ggtggttttt aaatggggct 60
 aagctattct taattttgtt ctggtgggta cagcagagat ttgaagggga tttgaatttg 120
 aatcatggaa gttgagtgtt gcagccctcg gtcttccgct caggggtgtg aggttgacat 180
 gaagccaacg atggtggtgg aagatacgct taatcaagga cgcattgcaat atggatgttc 240
 aactaccgc cggagatgcc aaataagggc tccgtgttgt aatgaagtct ttgactgtag 300
 gcattgtcat aatgaggcca aaaattcaat ggatgtccat ccacttgaca gacatgatgt 360
 accgcgccat gaagttcgaa a 381

<210> 1785
 <211> 441
 <212> DNA
 <213> Pinus radiata

<400> 1785
 cacaggcagc agataaatatg aggcacaaga attcgtgcc aatttcgtttc tttgcttact 60
 atttcttcct tcttctttta caaatggata tattctaate agtgcgctgg taatttgacg 120
 gttgcaggga agggntgctg tgatcacagg aggtgccagt ggaatcggag aggtcacggc 180
 caagtgttc gtggagaatg gagcgaaagt agngattgca gaccttcagg acgaccatgg 240
 aaaccgtctt gctcaatccc tcgctccaa cgctgcttt tccactgcg atgtctccaa 300
 agaggcgag gtttcgccc tgctagactt ggcgctggag aagcacggac gtctcgacat 360
 agtgttcagc aatgccggaa tcccaggcgg gttattctcg tccatggcag acgtcactgt 420
 cgaggatttg gaaagggtca t 441

<210> 1786
 <211> 435
 <212> DNA
 <213> Pinus radiata

<400> 1786
 caataatgca ggagtcctc aattagtgtt caacctgtg tttgtcttgg aattgagcag 60
 gcttctggcc aactggcttc tgtccccttt ctggatatca gaccatcaat atggcgcttc 120
 tctggatcag cccctcgcca attggcccat cactccttta actaatcctg ctagtcttcg 180
 ttattctggc ctcatcttct ccgcttctct tgcgccttct gcccctgttt cccccaaccc 240
 tgcataccct gaccagcaga gcgttcgtga gaatttgccc gccgtcttcg actatgggag 300
 tctcagtgtt gatcgccagg aggtggttgt ctgtattgtt tgtttcaatg agttcgtgtc 360
 gcgggatcga gtgcgcggc tagctaaatg tggccatgtt ttccatatgg agtggttggg 420
 taagtggatc gacta 435

<210> 1787
 <211> 323
 <212> DNA
 <213> Pinus radiata

<400> 1787
 gttgttcatt aagcatggag ccaaagtcatt aatcgagac gttgcggaga aagctggcag 60
 aaagcttgag gaatcacttt ctcccgtgtt ggcaacttac gtgcactgcg atgtgagcaa 120

agaaaaagat	gtgagcgcgg	cggcggatgt	ggccatggat	aagtatggcc	aactggacat	180
tatgtataac	aacgctggaa	ctaatacag	ctttttggtg	aagagcgtgg	tagagtatga	240
tatggagcaa	ttcgatcgag	tgatgaatgt	aaacgtgaaa	ggagtgatgc	acggcattaa	300
gcacgccgcc	cgcgtgatga	tcc				323

<210> 1788
 <211> 359
 <212> DNA
 <213> Pinus radiata

<400> 1788						
cccttatctc	ctccactctg	tttcatacat	gcaacaagct	ctggcagcag	caatggcggc	60
ccagactatc	atcgctgcct	ctatggcatc	tcctctaaca	ttatcaaata	gccactatcc	120
gtttcagtc	gagttcaagg	ggcctcggtg	tcgaatcccg	cagagggcat	tttccttcgc	180
gcctgcagcc	cgggcgctga	cagtcgctgc	agaggccaag	aaggccgttg	ccgtgctcaa	240
aggaaattca	caggtcgagg	gtgttgctaa	tctctcgag	gaagacaacg	gtcccacaac	300
agtgaagtc	cgtttgacag	gactgacttc	tgggaagcat	ggctttcatc	tacatgagt	359

<210> 1789
 <211> 350
 <212> DNA
 <213> Pinus radiata

<400> 1789						
ggatagttgt	gctccgagga	aagcattgaa	ttggggataa	tggcggaaaac	tgtcacatat	60
tcattggcgg	tgggtttcgt	ctgtttcgtt	ctgacgatgt	tactacttca	actctacaga	120
atagtgtgga	gggaggacag	tcgaggctac	aatttgccctc	ccggttccag	tgggtggcca	180
ttgattggag	agaccttgag	cttcatgcga	gggattaatt	ccattttctaa	accacgcca	240
ttcattcaag	atcgagagca	aaggtatggg	aagatattca	gaacaaattt	gtttggaaga	300
tctcgaatga	ttgtgtctgt	ggaccagaa	ttcaacaagt	atattctgca		350

<210> 1790
 <211> 337
 <212> DNA
 <213> Pinus radiata

<400> 1790						
gatttaggta	gggttttaag	gaagaaagac	gatccaagca	gtgggttttt	atcgagctcc	60
cacgcagttt	gaaggggtgc	gcagcagaag	aagatcggat	tcgttcatcc	tcattcaciaa	120
agatggatcg	ggataagctt	atgaagatgg	ctggtgcagt	tcgtactggg	ggaaagggtg	180
cagtacgcag	aaagaagaaa	gcagttcaca	gagccacaac	aacagatgac	aaaaggctcc	240
aaagtacctt	gaagagggtta	ggagtgaata	ctattcctgc	tattgaagaa	gtaaatattt	300
tcaangatga	gatgggtcatt	cattttataa	acccaaa			337

<210> 1791
 <211> 315
 <212> DNA
 <213> Pinus radiata

<400> 1791						
gttttgccatt	gaagaccaat	aaataattat	tgtgaagcag	cagcgtttta	atcagagatc	60
cagcaagaag	aggaccagga	aaaatcattt	gcagaacaag	aagataatcc	aagatgtcaa	120
gcacacgcag	ccctcagtg	gggtgcggag	aaacttgccg	ttgcgccgat	tgcaagtgtg	180
gagttgtgag	tattgcgcct	ccatccgacc	aaacaagtgg	gggacatgca	tattgcaagt	240
gtggagaaca	ctgcagctgc	aatccatgta	actgttcaaa	gattgacgag	actgttagtg	300
ggaaatcctt	ctgta					315

<210> 1792
 <211> 376
 <212> DNA
 <213> Pinus radiata

<400> 1792

gttttatcat	gcgatccag	tgcgatgcct	gcgagcaggg	agctgcttca	gtgatatggt	60
gtgcagacga	ggctgctttg	tgcagggagt	gtgatataaa	agtccacaag	gccaaacaagc	120
ttgccagcaa	acacaagaga	ttgcctcttg	tcggaacttc	cccaaagctc	tctcgctgcg	180
acatttgcca	ggatagggca	gccatcgttt	tctgtctcga	agatcggtgt	atgctgtgcc	240
aagactgcga	tgagtcggtt	cattctcgcg	acacattagc	agcaaaacac	caaagggttcc	300
tggccactgg	cattagggta	ggtctcaatg	ccctgtcatc	agaatctccg	ggctcaagcg	360
aatttgacaa	acagcc					376

<210> 1793

<211> 407

<212> DNA

<213> Pinus radiata

<400> 1793

gggaattccc	attctgcaca	tgcaatggac	aatggaatga	tggtatggat	agtttttagca	60
ggggtagtgg	caatggcagt	gtggtatctt	ttggtacagc	accaacagcc	taagcagagc	120
cacaatgttc	cttgggagac	tcttccaccg	ggggctgtgg	gatggccctt	tctcgagag	180
atcatctctt	tctatcttcg	aacaccggat	tttgtgaagc	agcggcgggg	aaggtagggg	240
aatttgttta	gaacgttcct	gataggatat	ccaatggtaa	tctcaacaga	tctgaggggt	300
aacaagttta	ttctgaataa	tgatggccgg	ctgttcgttc	ctgcatatcc	gtcgcattgg	360
tcacagataa	tggagagtg	caatatcttt	gctgctcgtg	gagactt		407

<210> 1794

<211> 532

<212> DNA

<213> Pinus radiata

<400> 1794

cctgggtgcc	ttcgtcgctc	acttcacaat	caagttgaaa	gtgaaatcaa	tcgatctgaa	60
ggtgaagggtg	aagggtgaagc	gtattctcat	tgcctcaca	ccgccatgga	cattacagca	120
cggcagatgt	tgcagttgat	tgcgccaccat	ttgctggaag	aggaagacga	aatggatggt	180
cttgaggtag	ggggaaatta	tccattctcc	tcatcatcat	cttcattatc	cttctctccc	240
acagtgaagt	cagatttttc	ccacgccact	gccagtggcc	catgccaaac	cagcgacagc	300
acatcattat	cagaagagaa	tgagagtgc	caacctctt	ctgcttcttc	ttcttggtga	360
tccactgttt	tacgaagcgc	agaggcggt	aatgtaaagg	taatgccaca	gccacagcca	420
caggaggagg	acagtcgaga	gaccatcaaa	gacaggcact	acagaggagt	gagggaagcgg	480
ccatggggta	aattcgagc	tgaaatcagg	gaccccgcca	cgaagggggc	ca	532

<210> 1795

<211> 502

<212> DNA

<213> Pinus radiata

<400> 1795

tgcataccat	cattgtaatg	gaggtgaaag	gaataggagt	gggattctta	ttaagcaatg	60
gaaggtttacg	ctgcgaataa	cgatgcagaa	ctttgagcaa	aacccttcaa	gtggaacaga	120
agttgttcta	tttcgatctc	aaggaaaacc	cccagggtca	ataccttaaa	atctctgaga	180
agacctccgg	ctcacggtct	acaataattg	tgcccattgg	tggagttgca	tggttcctcg	240
atctctttta	ttattatgtc	gacggagatg	acgaggaagt	tttgagcaag	gaattgcagc	300
tggatgccaa	ggtattttat	ttcgatgttg	gggtgaataa	aaggggtcgg	ttcttgaaga	360
tttctgaagc	atctacatcc	tacagtcgca	gcacaatcat	tgtacctgta	ggaaacacaa	420
gaaaagatgg	ttgggcagca	tttagaaata	ttttaggaga	gataaatgaa	gcttccaaca	480
agcttctggc	ccatccgaac	at				502

<210> 1796

<211> 476

<212> DNA

<213> Pinus radiata

<400> 1796

cgaaactcga	atcgatatgc	tttgtggcgc	gttcaaatat	ttgagcnggc	ttagcttctc	60
tggttcagaa	atggcggact	aaagtaatag	tgtgccccga	ggctctgggt	tcgaatctcg	120
ttggcgtgaa	agggtcaaatt	tttctctcga	gtttcattga	ttctgaaaaa	ctggcatagc	180
tatggcgtatg	agcaatggga	gatttgtgtga	agattttggat	aggattaagg	ggccgtggag	240
ccccgaggag	gacgcgtcgc	tgcagaggct	tgttcagaaa	tacgggccga	ggaactggac	300
cctgataagt	aaaggaatcc	cggggcgatc	cgggaaatcg	tgcaggctac	ggtggtgcaa	360
tcagctgagc	cctcaggtgg	agcacagacc	ttttaccccc	tccgaggatg	ctgctattct	420
gcaggcccac	gcgcagcacg	gcaacaaatg	ggcaacaatt	gcccagagccc	tccccg	476

<210> 1797

<211> 509

<212> DNA

<213> Pinus radiata

<400> 1797

ttccagacct	tttgcattct	cattattctt	ccgcctgtga	aaagatgggg	agatctccgt	60
gctgtgagaa	ggctcatact	aacaaagggg	cctggactaa	acaagaagat	gaccgcctta	120
tcgctcacat	tcgagcccac	ggcgaagggg	gctggcggtc	tcttcccaag	gccgcagggc	180
tgctgagatg	cggcaagagc	tgcagactgc	gatggataaa	ctacctgcgt	cccgatctga	240
agcgtggaag	cttcaccgaa	gaagaagacg	agctcatcat	caaactccac	tccttcgttg	300
gcaacaagtg	gtctttaatt	gcagggagat	tgcccgagcg	gacggacaac	gagataaaga	360
actactggaa	cacacacatc	aaaagaaaat	tgctgagcaa	gggactcgac	ccccaaaccc	420
atcgctccact	aggccagcca	aacaataccc	ccgtcactcg	gcctgttccc	gagcacgaaa	480
ttccggcatt	ccagaaccct	gcaacgcgcg				509

<210> 1798

<211> 247

<212> DNA

<213> Pinus radiata

<400> 1798

ccagactatc	atcgctgcct	ctatggcatc	tcctctaaca	ttatcaaattg	gccactatcc	60
gtttcagtc	gagttcaagg	ggtccgtggt	tcgaatcccc	cagagggcat	tttccttcgc	120
gcctgcaagc	ccgggcgctg	accgtcgtcg	cagaggccaa	gaaggccgtt	gccgtgctca	180
aagggaattc	acaggctcgag	ggtgttgatc	gtctctcgca	ggaagacagc	ggtcccacaa	240
cagtga						247

<210> 1799

<211> 147

<212> DNA

<213> Pinus radiata

<400> 1799

tcattattct	tccgcctgtg	aaaagatggg	agatctccgt	gctgtgagaa	ggctcatact	60
aacaaagggg	cctggactaa	acaagaagat	gaccgcctta	tcgctcacat	tcgagccccg	120
gggaaagggg	ctggcggttct	cttccca				147

<210> 1800

<211> 361

<212> DNA

<213> Pinus radiata

<400> 1800

cttcagtttg	cattgaagac	caataaataa	ttattgtgaa	gcagcagcgt	tttaatcaga	60
gatccagcaa	gaagaggacc	aggaaaaatc	attttgcagaa	caagaagata	atccaagatg	120
tcaagcacac	gcagccctca	gtgtgggtgc	ggagaaactt	gcgcttgccg	cgattgcaag	180
agtggagttg	tgagtattgc	gcctccatcc	gaccaaaca	gtgggggaca	tgcatattgc	240
aagtgtggag	aacactgcaa	ctgcaatcca	tgttaactgtt	caaagattga	cgagactgtt	300
agtgggaaat	ccttctgtaa	atgtggagag	aattgcgcct	gtgaaacatg	cacctgcagc	360
a						361

<210> 1801
 <211> 359
 <212> DNA
 <213> Pinus radiata

<400> 1801
 cgtggctgtt cccaggagag gagagcctca gctgtctcga tctgcgttaa ggggttacag 60
 aagaagaatt tcgaagatgg ttagatcttc ttgctattca aagcaaggtc ataggcgtgg 120
 gatttgacc cctatggagg atatgattct ctctgaatac attcgaattc atggcagtga 180
 tggatggaaa aatatcgcta aacgagcagg tcttaaacga tgtggaaaga gttgcagatt 240
 acgttggttg aactatcttc gccccgacat taaacgtggt aacatttctc ctgatgagga 300
 ggacctcatt attaggttgc atggccttct tggcaatcga tggctcttga tagcaggac 359

<210> 1802
 <211> 475
 <212> DNA
 <213> Pinus radiata

<400> 1802
 agcgtctata gaagagcagg gactaattcc atctttctcc atttctatatt ctcttcccaa 60
 tcaaaaccat ggcgtctaac ggacagctta atgcaggcac tggctgtgtt ggtgatctga 120
 ccaatgttgg agatcgacga ttggagggga aggttgcaat agtaacgggc ggggcagcgg 180
 gcataggaga agccattgtt cagttgttca ttaagcatgg agccaaagtc ataatcgccg 240
 acgttgcgga gaaagctggc agaaagcttg agcaatccct ttcacccgct gtggcaactt 300
 acgtgcaactg cgatgtgagc aaagaagagg atgtaagcgc agcagtggat gtggccatcg 360
 acaagtatgg tcaactggac attatgtata acaacgctgg aactaacgac agcgttttgg 420
 tgaagagcgt aacagagtat gatatggagc aattcgatcg agtgataaat gtaaa 475

<210> 1803
 <211> 382
 <212> DNA
 <213> Pinus radiata

<400> 1803
 attactttca gttttgcaag ctggagatga ctttgactgt ccagtatgtt tatcaccacc 60
 atcagaggct atcataacca tctgttcaca tgtgttctgt aagaagtgca ttgagaagac 120
 attgaaacat ctaaaagccac agtgtccatt gtgccgtaag cagcttacag catctgatct 180
 ttttagttca ccaaagggtg ctgacgagaa tgaagttaca tcagaaaaag tagccaaaac 240
 tggttcaaaa attaatgcat taatagctct attgaaagag tcccaggatc atgatccaac 300
 tacaaaatct gttgtatatt cacaatttgc aaaaatgctg gatctcttgc atgaaccttt 360
 gaaaagtcag gcttctagtt tg 382

<210> 1804
 <211> 533
 <212> DNA
 <213> Pinus radiata

<400> 1804
 atcgccctgga atttgtcttc tgcaagataa tattcaatta atctattgtc gaaggaaatt 60
 tgagccgtat aagaggataa tcaaaagaag ccggttgatt tctccgggat taaaggatgg 120
 atcaagaaaa ctggaacatc ggagctgatg gcactggctg ccaagctcca gaagggcaca 180
 ctctttgctc caataactgc ggcttttttg gcagttcggc aacgagaaac ctgtgttcga 240
 aatgttacag ggatctgatt atgaaggagg cccaagcctc atctgcaatg gccgccgttg 300
 agaagtcatt tgccgcgggt tctccgatgg aggaggaggc ccctcttttc aagccagatg 360
 ttttcgtcga acaaagccgt gcaccgatct ccccgccgt agtccaagcc tcgtcagttc 420
 acttggtcga tataggttca tcttcttctc cacaacctcc tgccgaaact cctaaccggt 480
 gcttctcctg caggaaacga gtcggtctga ccggttcaa atgtcggtgc gga 533

<210> 1805
 <211> 549

<212> DNA

<213> Pinus radiata

<400> 1805

gagtgaggaa	gctgtagatg	aaaagcgtgt	aaatctgcag	caagcagaag	gtccggagga	60
gcccagggtt	gtaactgcga	gcacattaga	atccccaaaa	agtacagaac	aggagaatag	120
tcttgagggt	gaggaagctg	gtgacaaaaa	gctccaggca	catgtgaatg	aaacgtcttt	180
gaatgcagat	caagaaaatt	ccatcaagga	gcttcacaac	aagtatcctc	gttactcgga	240
agaacttttg	acgaatatgc	tggctgatca	ggatggcgat	ttgaaagagc	tagaagcact	300
cttaaaaaaca	ttacaacgcc	aagagattag	agctgctaata	cgaaaaatgt	caggtccatc	360
atcttcaaaag	gcaacagata	acacagatgt	ttccacggaa	tcaccaccct	caaagctaca	420
gaatgcctct	aagggcaaaa	ccagaggaaa	gagcgccaag	aagagagaaa	gggatacaac	480
tttatccgta	ggtagagttc	acaaaacgcg	tcgaaaaaact	gcttccgacg	atgtgaaggc	540
cgctttctaa						549

<210> 1806

<211> 397

<212> DNA

<213> Pinus radiata

<400> 1806

gttttgggct	ctcatttggg	agttacattc	aaccaagctc	atcacatggc	gtccgagaag	60
gaagctgctc	ttgctgccac	accaccagaa	gatgataaac	ctacaatatt	tgacaaaaata	120
ctgcagaagg	agattcccag	tacagtgggt	tacgaggatg	agaaggtact	tgcatcagg	180
gatatcgcac	cccaagcacc	tactcacatc	attatcatcc	ccaaagtaag	ggatggcctg	240
actggcctat	ctaaggcaga	agagaggcat	gaggatattc	taggtcacct	gctatacact	300
gcaaaagtta	ttgcaaagca	ggaagggtta	tctgatggct	tcagaattgt	cattaacgat	360
ggtcctactg	gatgccaatc	tgtgtaccat	ttacata			397

<210> 1807

<211> 242

<212> DNA

<213> Pinus radiata

<400> 1807

caagatgggc	agatcttctt	gctgctcaaa	agaagggctc	aaccgtgggg	cctggaccaa	60
aagggaggat	atgattctct	ccgaatacat	tcgaattcat	ggcgatggcg	gatggagaaa	120
tatgccccaa	agagcaggtc	ttaaacggtg	tggaaagagc	tgagattac	gatggctgaa	180
ctatcttcgc	cccgaacatta	aacgtggaaa	catttcccct	gatgaggagg	aactcataat	240
tc						242

<210> 1808

<211> 364

<212> DNA

<213> Pinus radiata

<400> 1808

caagagtaaa	cccgaaggaa	tagaagggga	aggaggcatc	ggcagcgttg	ttcctcctcc	60
tctcctctcc	tgcatctctc	aaactcaaat	acctctcctc	tcacaatcat	ggaaggcgga	120
gtcgtctttg	aatctgtgca	aaacccactg	gatcgccctga	acactggaaa	tatggaccat	180
ggttgtgccc	attacaggag	acgatgtcgg	attcggggccc	cttgttgcaa	tgagatctat	240
gattntaggc	actgtcacaa	tgaagccatg	agccatctaa	aggaccctt	gctgcgccat	300
gagctcccaa	gatacaaagt	tgaacggggt	atttgttctc	tctgtgacac	tgagcaaaaat	360
gtca						364

<210> 1809

<211> 265

<212> DNA

<213> Pinus radiata

<400> 1809

cttaagtttc	agatgcctgg	taattcttct	tttccaactg	gaaacgctgc	cccatcaact	60
aaaaatcttt	actattcatt	tgacttggga	gttgtacatt	tcttgtatat	gtccactgaa	120
actaattttt	tagatggaag	tgatcaatat	gctttcatag	agcaagattt	gaaaaagggt	180
gatagaaaca	agactccatt	tgtagtattt	caaggtcacc	gtcccatgta	tacgactaac	240
tatgaactaa	aagatgcgcc	tctaa				265

<210> 1810
 <211> 346
 <212> DNA
 <213> Pinus radiata

<400> 1810						
cttgaatcga	tcttgccctgc	ttgtgccgga	gcgcgcacag	tgtgtggttt	gttctcgttt	60
ttcatcttaa	agcggcggtt	gcaggaattg	atttgttgag	gggacgagat	gtgtgcagag	120
gtaagtcaga	gtgccatggc	cgtgcacact	atgcagatgg	cgagaatgga	aatgaagcgt	180
gaaataggag	tctgtgagca	ggaagcttcg	tcggccgtga	aggaaacgca	tttcagaggc	240
gtgaggaaaa	ggccgtgggg	gagattcgca	gcggaaatta	gagatccctt	gaagaaaacc	300
agagtctggc	taggcacttt	tgacactgcc	gaagaagctg	ccgagc		346

<210> 1811
 <211> 353
 <212> DNA
 <213> Pinus radiata

<400> 1811						
cgaaactcga	atcgatatgc	tttgtggccg	gttcaaatat	ttgagctggc	ttagcttctc	60
tggttcagaa	atggcgact	aaagtaatag	tgtgcccga	ggctcgggtg	tcgaatctcg	120
ttggcgtgaa	aggtcaaatt	tttctctcga	gtttcattga	ttctgaaaaa	ctggcatagc	180
tatggcgatg	agcaatggga	gatttgtgtg	agatttggat	aggattaagg	ggccgtggag	240
ccccgaggag	gacgcgtcgc	tgacagaggc	tgttcagaaa	tacgggccga	ggaactggac	300
cctgataagt	aaaggaatcc	cggggcgatc	cgggaaatcg	tgcnaagcttc	ggg	353

<210> 1812
 <211> 185
 <212> DNA
 <213> Pinus radiata

<400> 1812						
tcttgctgcc	acaccaccag	aagatgataa	acctacaata	tttgacaaaa	tactgcagaa	60
ggagattccc	agtacagtgg	tttacgagga	tgagaaggta	cttgcatcca	gggatatcgc	120
acccaacac	ctactcacat	cattatcatc	cccaaagtaa	gggatggctt	gactggccta	180
tctaa						185

<210> 1813
 <211> 337
 <212> DNA
 <213> Pinus radiata

<400> 1813						
caataaatgg	ccgaatgaat	taatcaacga	tgaaatgaat	taatgaataa	gctattggat	60
ctaggaaggg	ttttgaggct	gaaagttttg	ggctctcatt	tgggagttac	attcaaccaa	120
gctcatcata	tggcgtccga	gaaggaagct	gctcttgctg	ccacaccacc	agaagatgat	180
aaacctacaa	tatttgacaa	aatactgcag	aaggagattc	ccagtacagt	ggtttacgag	240
gatgagaagg	tacttgcatc	cagggatatc	gcacccaac	acctactcac	atcattatca	300
tccccaaagt	aagggatggc	ttgactggcc	tatctaa			337

<210> 1814
 <211> 340
 <212> DNA
 <213> Pinus radiata

<400> 1814
 gttcaaggga gacgggatat tcagagtccg atcgccgcca tggccgtaga caccatacag 60
 atggcgagag tgggtgtaaa aatgaagatc ggaggaggcg gctgcgagga agaggcgctc 120
 tccgctgtga aggaaacgca ttccagagga gtgaggaaaa ggccgtgggg gagattcgct 180
 gccgagatca gagatccctt gaagaaaacc agagtctggc tgggcacttt tgacactgca 240
 gaggaggccg cccgagccta cgataacgct gccagaaatt ccgcggggcc aaggcgaaaa 300
 ctaattttct tctgtctccc cacaatgaca ttagcaccaa 340

<210> 1815

<211> 433

<212> DNA

<213> Pinus radiata

<400> 1815
 ccgctatcct ttccattaca tcccacgtta ggtcacggtt tccaaccctt gcacggccat 60
 tcttctgtta agatggtgag atctccctgc tgcgacaagg ttcataccaa taacaaaggc 120
 gcctggacca aagaagaaga cgagcgtctc atagcacaca ttgaagccca cggcgagggc 180
 tcatggcggtt ctcttcccaa ggccgcaggg ctgctgcgat gtgggaagag ctgcaggttg 240
 cgatggataa actacctgcg tccctgatctg aaacgcggaa gcttttcaga agaagaagac 300
 gatctcatca tcaaactcca ctccctctct ggcaacaagt ggctcgcttat tgcagggaga 360
 ttgccagggc gaacggacaa ccgaaaataa aaaattactg gaacacgcac atgaaaagga 420
 aattggtgag cag 433

<210> 1816

<211> 225

<212> DNA

<213> Pinus radiata

<400> 1816
 atcacagtcg gcctctgata aaagaagaag ccgaatcaag gtgataattc tgcaaattct 60
 gcagatgtag aaactcttct tctcaggtt gatgaaacag cttctgctga tctgacagtg 120
 ttcccaggtt ttgttacctt ttatgtacca tacgggttcc ccatatggca cactttttaga 180
 cccacaataa ctcaaacttc caatgtttat aagccaacag ctgta 225

<210> 1817

<211> 337

<212> DNA

<213> Pinus radiata

<400> 1817
 gttgctgctg ctctctgttc tgcttctggt actgctgttg ctgctgtctt gccagtgaac 60
 ggtgctgctg ggtcagatc tagtggtgat tccgagcatt cggatataga ggcgtctttt 120
 aaagaggccg aatgcagtca ggccattggt gaaaggaggc ctccgaaacg gggcaggaag 180
 cctgccaatg gtagagaaga acctctgaat catgtagaag ctgaaaggca gaggcgagag 240
 aagttgaacc agaggtttta cgcactccgc gctgtggttc ccaatgtgtc caagatggat 300
 aaggcctctc tgttgggtga tgccatttct tacatta 337

<210> 1818

<211> 390

<212> DNA

<213> Pinus radiata

<400> 1818
 gtttgttcga acgatgaaaa ccagctaaaa caaagcgagc ggattggcag gattcgagca 60
 gtggctcctg gggcgaggt gatagaagaa gaagaaacct accatataca catacatata 120
 ttatatacat agacacatgg gggctccgaa gcagaaatgg acttccgaag aggagggagc 180
 tctcaaagca ggtgttgaga agtatggcac tggcaagtgg cggaccattc agaaggaccc 240
 tgagtttgga cactgcctcg ccgctcgctt caatgtggat ttgaaggata agtggcgcaa 300
 tatgagtgtg agtgctagtg gccaaaggtc aagggataag gttaaagact caagagtaaa 360
 agctattgcc tctctgcctt attcatcaag 390

<210> 1819
 <211> 367
 <212> DNA
 <213> Pinus radiata

<400> 1819
 attcaaaatg ggaaagaagt tggagctgaa acgcatccaa aaccctaata gttcacgtga 60
 ttccttctcc aaatgcaaga ggggactgct aaagaaatcg gtcaagctct ttgttctctg 120
 tgatgctgaa gtttccctca tcattttatc tgaaaccgcc aagatttacg agtttgcaag 180
 caacaagtcg tgactagctc ttgtgaattc ttctgatcaa gttagagatc catatactga 240
 tatataaaag catactttca cattgcaatt ggagcagatc tagatgcaga agtgcaacct 300
 tattatacct aaaggccatc agctgcaaat caagacccat tttctatctt ttgagatcgt 360
 gatacag 367

<210> 1820
 <211> 487
 <212> DNA
 <213> Pinus radiata

<400> 1820
 acgatcttca ccctcggtgc gctctctgct tatcccgatt cccagccaac tgctattata 60
 ttcggagtac tgtacttcca gaactggtat cttcaagcac caagaccatt ttctgagctg 120
 ttaaaagatac tatgagtgat atggatcggt catcatcaga agattcagtg gatttctcaag 180
 gtgatgtgaa tgcaaaactac aagatgggtt tctcggaaga tgaaaaggat ctcataagca 240
 ggctgtacaa tctactgggc cagaggtggg ctttgattgc tgggcgaatt cccggcagaa 300
 ctgcagagga aatagagaaa tattgtagca ggcgatatat tagtgagtac taggtcacat 360
 gggtttctaa tagtcaatga agaagaaggg tagaagcagc cttgcctatc taactgattt 420
 aagtttggga tatatatatc gactttgagt gatggccata tcttctgggg tttataagga 480
 agtatgt 487

<210> 1821
 <211> 319
 <212> DNA
 <213> Pinus radiata

<400> 1821
 ttttaagcatt tcattgagtc ttaggtcacg gtttccaatc ctggcaggtc tcattattct 60
 gtctctctgg caagatgggg agaactccct gctgtgaaaa aggtcataca aacaaaggcg 120
 cgtggaccaaa agaagaggac gatcgccctc tcgctcacat tcgagcccac ggcgaaggcc 180
 gctggcggtc gcttcccaag gccgcagggc tgatgcgatg cggaagagt tgcaggctcc 240
 gatggataaa ctacttgctg ccagtcctcaa gcggtggaac ttctcagaag aagaagatga 300
 gttcatcatc aaactccac 319

<210> 1822
 <211> 320
 <212> DNA
 <213> Pinus radiata

<400> 1822
 gcaaagagtt gcagattgctg ttggctgaac tatcttcgtc ccgatattaa acgtggtaac 60
 atttctcccg aggaagaaga gctcattatt cggttgcatc gccttcttgg aaatcgggtat 120
 gtagagaatc gggggacatg atttattcat gcgccagaat ttcacgattc ctcatcgaat 180
 tagtcatgca atgtttgtgc aggtgggtctc tgatagcagg acgactgcct ggtcgaacag 240
 acaacgaaat caagaattac tggaacactc atatgagcaa gaagccatgg ctgtcaatgg 300
 acgaatctca gtccaatact 320

<210> 1823
 <211> 338
 <212> DNA
 <213> Pinus radiata

<400> 1823
 gtcgagctcc ttgctgcgag aaaacccata caaacaagg cgcctggagt aaagatgaag 60
 atgaagcact cgttgcatat attcaagccc atggagaagg cagttggcgt tcccttccca 120
 aggcgctgg gttgcagcgg tgtggcaaaa gctgcaggct tagatggata aattatctcc 180
 gtccctgacct caaacggggc aatttcagcc cagaagaaga tgagatcatt atcaaacttc 240
 attctatgtt gggtaacaag tggctcttga tcgcaagcaa attgccaggg cgaacagata 300
 atgagataaa gaattactgg aacactcaca ttaagaga 338

<210> 1824
 <211> 332
 <212> DNA
 <213> Pinus radiata

<400> 1824
 gccgaggtga ggaggcatta cgagcttctt gttgaggatg tgactgtgat tgagtctggc 60
 cgggttgctt tgccctgctta ttctgaaaat tcgtatacac cgcccgatt gatgtcagat 120
 cagttgggag atctcacaaa acagcaggcg gtttctgtga aggtccctc ggccaaggca 180
 tccgaacagg agcgcaaaaa gggcgtgccc tggactgaag aagagcacag actcttcttg 240
 atgggattga ataaatatgg caaagggtgat tggagaagca tatcaagaaa ctttgtggtc 300
 tcacggacac ctactcaagt tgcaagccac gc 332

<210> 1825
 <211> 301
 <212> DNA
 <213> Pinus radiata

<400> 1825
 accgtcgaga gagcttcata tctaaccaat aataacacct gtatggcttc atagcttcac 60
 agcaacaggg caccatgggc cgagctcctt gctgggataa aagaaaggcg 120
 cctggactct agacgaagat aaaatactcg tcgattacat taccaaacat ggccatggca 180
 actggcgcgc actgcccag caagcagggc tcttgcgatg tggaaagagt tgtcgctgc 240
 ggtggacgaa ctacctgata cccgacatca aaagaggga ttttattcca gaagaggaat 300
 a 301

<210> 1826
 <211> 498
 <212> DNA
 <213> Pinus radiata

<400> 1826
 tttgcatcca attcttcctg tatcatctaa ttgctcagtc tagcaattac gcaatctcgg 60
 tccccagtc tgtctgacga agagggtta gcaactgctg cctctgtggg caatctgacc 120
 ttgctgctgc atgcatctca gcgacgattg gaaggcaagg tcgcaataat aacgggcgga 180
 gcatctggca taggagaagg catcgctcgg ctcttcacaa agcacggagc cagagtcata 240
 atcgagaca ttgcagatga aaccggcaaaa attctggccg aatccctttc gctccggcc 300
 acttacgtgc gctgcatgt gagcaaagag caagacgtca gcgctgcggg ggatttggcc 360
 atggagaagt acgcgcagct ggatatcatg tttacaacg caggaaatcg cgatacgggt 420
 aatgtttcaa ggggagtggc agagtacgag atggagcagt tcgaccgagt tatgagcgtc 480
 aacgtcagag gggatgatg 498

<210> 1827
 <211> 551
 <212> DNA
 <213> Pinus radiata

<400> 1827
 cgtggctctt cccggcagac ctagtaagcc gactactgta aatttattct tttagggtta 60
 cagaagaaga aaatacaaga tgggcagatc tccttgctgc tcaaaagaag ggctcaaccg 120
 tggggcctgg accaaaagg aggatatgat tctctccgaa tacattcgaa ttcattggcg 180
 tggcggatgg agaaatatgc ccaaaagagc aggtcttaaa cgggtgtggaa agagctgcag 240
 attacgatgg ctgaactatc ttccgccccga cattaaacgt ggaaacattt cccctgatga 300

ggaggaactc	ataattcggc	tccatcgct	tcttggaat	cgatggcgc	ttatagcagg	360
aagattacca	ggtcgaacag	acaacgaaat	caagaactac	tggaacactc	atatgagcaa	420
gaagctgctt	ccattgaacg	aatctgaacc	caagactttg	cctgtcccca	agaggaggtc	480
gcaatctcct	tctccctgc	aaaatcgagt	ctttaaagcc	aaccctgtga	aaataacaac	540
ggtggtcagt	c					551

<210> 1828
 <211> 256
 <212> DNA
 <213> Pinus radiata

<400> 1828						
ctgaaattcg	gatgccgaaa	tcccatgaga	agatatggct	gggacccctat	aataccgccg	60
agcaagccgc	ccgtgcttac	gacgccgctg	tgtattgtct	gagaggaccc	gccgcaaac	120
tcaattttcc	agaaaccgtg	ccgggtattc	cgtctgcgtc	ttccctttcc	cggcagcaaa	180
ttcagcatgc	agccaccaga	tatgccttgg	gtgaaatccc	tttgatttcg	ccctctctgc	240
aaaatattga	ctcgag					256

<210> 1829
 <211> 372
 <212> DNA
 <213> Pinus radiata

<400> 1829						
gcagattctc	aacagaattg	ggaaagtttt	gtgaatattg	aagatggctc	agtgccatga	60
aatcattgaa	agtcgttgca	gagacagcca	tggcgcatca	gatctgaagc	tgtttgccat	120
ggccgcgggt	ctggtgacga	gcaccggagg	agtatgtttg	ccggttctgt	ttgccagata	180
ttcccgaggg	ctcaaatttt	acggcactct	tctggtactg	gtgaaatgtt	tcgctgccgg	240
agtgattctg	tccacaggat	ttgtccacgt	catgccggaa	gccttccgcg	ctctggaaag	300
cgactgcctg	ccggatcatc	catggcacca	gttcccgttc	gccggactcg	tggccatggc	360
cggggcaatc	ct					372

<210> 1830
 <211> 486
 <212> DNA
 <213> Pinus radiata

<400> 1830						
agcgggtggt	gatttagccg	agggcgaaga	ggaggacgaa	gaagggtctc	gtaacaaacg	60
tggcgattga	tcctacctta	gcctgaaaat	gctgtcagga	ggctacgcaa	ccagatccga	120
cactactact	gtcaacaacg	gatccgctaa	tggcccaata	ggaagtgtct	ccccaagaat	180
taactcgata	caaaataata	atccaggagc	tgtcaggcct	ggctggggaa	ccatgccctt	240
tcacatgaat	ccttatcatc	cccaatcaat	gcctcttccg	cccccaatg	gtatgcaggg	300
tcagcttggt	tgcagtggat	gtagaactct	tcttggttat	ccgcaagggt	caccaaagt	360
ttgctgtgca	gtatgcaaca	cagtcactcc	agttccacct	cctgggacag	aaatggctca	420
gctaactctgt	ggacgttgct	gtacattgct	aatgtatggt	cgtggagcaa	ctagtgttca	480
gtgctc						486

<210> 1831
 <211> 330
 <212> DNA
 <213> Pinus radiata

<400> 1831						
gtttttccgc	aggaagtttt	gatttgagta	ggaaatcctt	tggcctcctg	gagctttgat	60
ttgctcagga	aaccctagcc	cttcggttcc	tgaagctttg	cttttcgtag	gaaacccttt	120
ggcaccggta	ggcgatggct	cccagcaaca	acagaagaga	cgacaatgga	gcacgaggag	180
ttcacttcag	gggcgtcagg	aagagccct	ggggtcgata	cgcggcggag	attagggatc	240
catggaaaaa	agttcgtctt	tggctcggca	cctttgacac	ggccgaggaa	gccgccgggg	300
cttatgacac	tgccgctatc	tccttcagag				330

<210> 1832
 <211> 413
 <212> DNA
 <213> Pinus radiata

<400> 1832
 aaatctgact atcgggatag tgatgatgaa ggaggaggta ctgttcgaga aggaaaggat 60
 ctgcaaacct caaatattcat cgattatttt ggtcaaagta atcatacaga agaagcagaa 120
 aatgagcatg atgcatcagt ggataccaaa gggcccttgg aatccagcaa tgaagtctggc 180
 catcctacca cataccccga atcttcttca ttgtcagcgc aaggctctga gcctcgagtt 240
 ttttcctgta attactgcca gagaaaattc tacagctcgc aggccttagg aggccatcag 300
 aatgctcaca agcgagaacg caccttggca aagagggggc aaagaattgg ggcttttcaa 360
 cacaggtaca taagcatggc atccctgcct ctccatggct ctacagaatc agc 413

<210> 1833
 <211> 260
 <212> DNA
 <213> Pinus radiata

<400> 1833
 gctatttgca gcatttccct ccatccgtac caaaaagatg ctgacaaaca tttactagca 60
 agacagactg gactgaccag aagccagggt tcaaattgggt ttataaatgc acgtgtccgc 120
 ctttggaac ccatgggtgga agaaatgtat atggaggaac tttagagaggc cgaaacacag 180
 aatcatgcag cagattcgaa ggtaacaaca gaaagtgggtc aaaacaatga agaaacggtg 240
 tcaaaggaag gagctgggaa 260

<210> 1834
 <211> 338
 <212> DNA
 <213> Pinus radiata

<400> 1834
 aattgaatcg gccatgggtt tgtatgaatt gttacatgta cagcagattc agcaaataca 60
 gcagcagcag tttcaattgc aacaacaaca aatagcagca gcggcttcaa tccaccatat 120
 gggtcgaaac cctctgggtc ccagagctca gcccatgaaa cttcatggca gcagcctatc 180
 aaagccggct aagcttttaca gaggcgtgag gcagcgccac tggggtaaat gggttgcaga 240
 gatcagggtta cccagaaaca gaaccagggt atggctgggg acttttgata ctgcagagga 300
 agcggccatg gcttatgaca aggctgctta caggctga 338

<210> 1835
 <211> 240
 <212> DNA
 <213> Pinus radiata

<400> 1835
 gcttattgga atgcctgaca ctaactatgg aagcgaacag acaaagtctt gcaaaaaaca 60
 gaaaagaata cgttccaagg attcaggaga agatgggtgaa gatagacaga gataacatcc 120
 tttcattgtt actgagcccg gtgaacttgc aagagggaaa aagaatgggt tagactatct 180
 ctttgatctt tatgaacagt gcgggaaatt tctgctggat gtgcaacata ttgcgaagga 240

<210> 1836
 <211> 349
 <212> DNA
 <213> Pinus radiata

<400> 1836
 gataaatcca gatgagggtt tagcagtgaa ctttgcattc caactgcac acatgcccga 60
 tgaaagtgtg tctacaaaga acctacgtga ccggcttcta aggatgggtga agtctctcaa 120
 ccctaaagtg gtcacagttg tagaacaaga ggtaaacact aatactgcac ctttcttacc 180
 ccggttcatg gaagcattaa actattactc atcagtgttt gagtctctag atgctacaat 240
 tccaagggat agtagagatc gtatgaatgt tgaaaaacag tgccttgccc gagacatagt 300

gaacataatt gctttgtgag ggggaagaaa ggggttgagag gtatgaagt 349

<210> 1837
 <211> 457
 <212> DNA
 <213> Pinus radiata

<400> 1837
 gaaaagtatg ttcaagtttt ttccattcaa acatatcctt gttggagggga ttcggaaccg 60
 tctccggtcg tcttcaacca gtctgacccc aactcgcagt ctcttgact ctcaaagtat 120
 aaatttttca agaattggcta attcgaatcg aggatgcttc atatgcggtt ctgaggatca 180
 tcgaaaagcg gactgtccca caccgcagaa acttacctgt tatcagtgcg gtggagtggg 240
 ccatcagtct cgggactgct cttcctccga gaagcgcaaa acctgctaca aatgtggtga 300
 agagggccat atctctcgcg actgttccaa tgcgccaacc tctgagtatt ccggtggtaa 360
 ttccggcacc gaatgttata aatgtggtaa attgggtcat atctctcgct cctgtccgac 420
 aaatgagtca actgctgact atgctagggc tcctagc 457

<210> 1838
 <211> 395
 <212> DNA
 <213> Pinus radiata

<400> 1838
 ctgaaatata gttaaattca ctcttttggg ctctagttact gcgctcgccaa tatggaaaat 60
 ctccccaatc agcaacctga ccttgaaatt gctcaaacac acgaggatcc cgggtcccgc 120
 caatttaagg gaattcgact gcgaaaatgg ggaaggtggg tatcggaat ccgataacc 180
 aaatctcgag agaaaatatg gctgggctct tacacgactc ccgagcaggc tgcccggtct 240
 tacgacgccg cagtgtattg tctgaaaggg cccaacgcca aattcaactt tccggaaacc 300
 gtgcacgaca ttccgtctgt gacttctgtt tcccgtcagg aaattcagca cgctccctc 360
 aaatatgcct tgggccagcc cctccgagt ttgca 395

<210> 1839
 <211> 395
 <212> DNA
 <213> Pinus radiata

<400> 1839
 gctaaccacag cccttatata tcatcatggg aagcttcttg cacttcaaga ggcagataaa 60
 ccttatgcac ttagagtcct tgaggatggg gatttgcaaa ctcttgggct aatggattat 120
 gataataaat tagcacactc cttcactgca catccaaagg ttgacctgt tacaggggag 180
 atgtttacat ttggttacca acacaagcct ccctatttaa cttaccgggt tgttacaaag 240
 gagggataaa tgcttgatcc agttcctata acacttccca aacctgtcat gatgcatgac 300
 tttgccataa ctgataacta tgcaatcttc atggatcttc ctctctattt ttctccaaag 360
 gatatggtaa aaggtggact catcatgtct tatga 395

<210> 1840
 <211> 468
 <212> DNA
 <213> Pinus radiata

<400> 1840
 ctcatctcag tgattcactc actgaaatta ttgttagaat cactgttttg gcccagagc 60
 ttctgcgtcg ccaaatatgg agatacgctt ccagcaggaa aacgaccagg acattgctcc 120
 gccacacgaa gatcgcggtg cccgccatt taaaggagtc cgaccgcgta aatgggggat 180
 atgggtatcg gaaatccgga tgccgagatc tcgacagaaa atatggctgg gtcgtacaa 240
 aaagcccagag caggccgccc gcgcctacga cgccgcagtg tattgtctga gagggctcgaa 300
 cgccaagttc aatttcccca attctgtgcc cgacattccg tctgcgtctt ctctttcccg 360
 ccagcagatt caactcgctg ccgccaataa tgcgttgat cagtcctctt caagcccgcc 420
 gtctctgaac aataataaag aggaaccgag gtcaccgtcg cagtcgtc 468

<210> 1841

<211> 378
 <212> DNA
 <213> Pinus radiata

<400> 1841
 aaacaatata gtcgacattg ttgcagcatc tagagctatt cgtgaaccac gtgtagtggt 60
 acaaacaacc agtgaaattg acatccttga tgatggatat cgatggcgca agtatgggca 120
 gaagggtggtg aaaggaaatc caaatccaag gagttactat aaatgcacaa atgctggatg 180
 tccagtggagg aaacatgtgg aaagagcatc acatgatcca aaagcgggtga tcacaacata 240
 tgaaggaaaag cataaccatg atgtgcctgc tgccagaaac agcagccatg ataatgctgc 300
 aaaaggggaat ggggcagctc ctctagcaat gcagaataat gtcccagcgc ctatgaatgc 360
 tataaccagc cctgttcc 378

<210> 1842
 <211> 382
 <212> DNA
 <213> Pinus radiata

<400> 1842
 ctcccacctc catttcactc tgccgagtc attactctcc ctatcgtcga accacgtctt 60
 tctcatcgac caacaatgac tcagcagaca acctcaccaa cagttagtcg cgccgcactt 120
 gctcttccca cttctgcctc atccacatct gcaaagtctg cagctgttcc agtaccagcc 180
 caagccaacc ctgcgaaacg tctcgttctg gatctctcgg cagaggagaa gcgagaggct 240
 cgtgctcatc ggaacagaat cgcagctcag aactctcgtg acaaacgcaa acagcagttc 300
 actagtctcg aacaacgagt catcgacctc gagaacgaga accgccaatt acgagacgct 360
 ctgcgcactt cgcagccgaa cc 382

<210> 1843
 <211> 314
 <212> DNA
 <213> Pinus radiata

<400> 1843
 catagaaaga gctttatgtg tcttgaattt gaaccctctc ctctgttttaa agaatccgag 60
 ctttgcaaac acgccttgag ctagactcgg gaatacccca gcaacaatcc gacatggcta 120
 aatcctcgca aaaccagaaac ccccgcaaca gacgcgaaaa ccgcttacgg aagtcacggc 180
 agttcaaggg aatacgaatg agaaaatggg ggaaatgggt gtcggaaatt cgaatgcca 240
 attccactgg gagaatttgg ctaggctctt atgacacgcc ggaaatgggt gcccgcgcct 300
 acgattttgc ccgg 314

<210> 1844
 <211> 384
 <212> DNA
 <213> Pinus radiata

<400> 1844
 ccggttccta gttcgaatcc ttgccctaac gcagtcctcg gttttaagac tcaatcttta 60
 gtgactcccc cgcaacatgg ttaagccctt gccaaaaacag agcagcccga gcggatcgga 120
 aaactgccaa ataaagtcgc ggcagttcaa aggaatccga ctgagaaaat gggggaaatg 180
 ggtgtcgga attagaatgc cgaattccag ggccaaaatc tggctgggct cctacgactc 240
 cccggaaaaa gctgcccgcg cctacgactt tgcgttgtac tgtctaagag ggtcgaaggc 300
 cacattcaat tttcccgaact ccccgccgga aattccatgc gcctctgacc tgtcgccgcc 360
 gcaaattcaa gccgcccgcg ccag 384

<210> 1845
 <211> 171
 <212> DNA
 <213> Pinus radiata

<400> 1845
 acatcccgtc ttcactttgt tgatcaacaa ttacgacaac agcagagctct tcagcagcta 60

ggaatgatac	agcagcatgc	ctggagacca	caaagagggc	ttccagagag	ggccgtttct	120
attctccggg	cttggctatt	tgagcatttc	cttcatccgt	accccaaaaa	t	171

<210> 1846
 <211> 436
 <212> DNA
 <213> Pinus radiata

<400> 1846						
agattgatca	aacacaaata	ccgtaaaatc	gcagcgaaga	tccaaaattc	caccatgggg	60
actgtggcgg	aagatggcag	caagggttac	acggccgtaa	atccccatcc	caaaaagggc	120
gtcgccctcg	ggctgggtga	catggtggag	aaactgggtg	ttgaaacttc	tgcgttgat	180
agttcgaaga	agcctctgca	ttttcttttg	gggaacttcg	ctccagtctc	ggaaactgcc	240
cccaaatecg	acctgcatgt	tggtgggcaa	cttcctagtt	gcttggatgg	agagttcgtg	300
cgcgttggtc	ccaatccgaa	attcgaccg	gtagctggct	atcactgggt	tgatggagat	360
ggaatgatcc	atggtctgag	aattaaagat	ggtaaagcca	catatgtgtc	acgttatgtg	420
aagacatcac	gcttga					436

<210> 1847
 <211> 303
 <212> DNA
 <213> Pinus radiata

<400> 1847						
ggaggcgagc	cattctttgt	tccccgctcc	tccgatacctg	cggcgccgga	agacgatggc	60
tacatcctca	cattcatgca	caacgaggag	acctcgaagt	cggagcttct	tattttggac	120
gccagatctc	cgaccctgga	acccgtggca	acggtaaagc	tgccgtccag	agtcccatac	180
ggattccacg	gcacattcat	cacttctgaa	gagcttgcca	agcaggtgcc	gtgaagacgc	240
gctgtcttcc	gcccttcttg	ctttcttgat	tacctacaa	cacctgggtc	tgtactttct	300
tta						303

<210> 1848
 <211> 551
 <212> DNA
 <213> Pinus radiata

<400> 1848						
gcgatttcga	gtgctgtaag	caggcaacga	cgcctgtttt	gcttttagagt	ttaacagaaa	60
agaagaatgt	gtggaggtgc	tatcatctcg	gactttataa	tacccccctgc	gagccgaggc	120
cgccgggtga	ctgccaggga	tatatggccc	gattttgata	agttctctga	gtttattaat	180
ggaggtgctg	cggtggagtgc	ctttgatgtc	agcgttgatg	tcgatgacga	cgaggaggat	240
tccgacgatg	acgagttcct	cgattttgag	gagagctatc	agaacaagaa	gaagaagcag	300
caacagccga	tatccccac	caagggtttc	gagcttcctt	tagctcgggg	tcttgatgga	360
ccggcgccca	agagcgcggt	gagaaagagg	aagaatttgt	tcagagggat	caggcaacgt	420
ccatggggga	aatgggctgc	agagatcagg	gatcccagaa	aaggcgctag	ggtttggtcg	480
ggtaccttta	atacggcgga	ggaagctgct	cgggcttatg	atgcagctgc	acgaaagatc	540
agaggtaaga	a					551

<210> 1849
 <211> 527
 <212> DNA
 <213> Pinus radiata

<400> 1849						
gaacagtcca	gcctcgttgc	accctcctca	gtcaccacaa	acagcactgc	agcgaaagga	60
caagggcctg	ctgatactga	gtctcaacca	gacctaaactg	ctgccgagaa	gccttcaatg	120
gagcccaaga	aaccgccaag	aaagaaaggt	cagaaacgaa	acaggggagcc	cagatttgca	180
ttcatgacca	aaagtgatgt	ggatcatttg	gaagatggct	atagatggcg	caaatatggc	240
caaaaggctg	tcaaaaacag	ccctttcccc	aggagtact	atcgttgcac	aaatggaaaa	300
tgctcagtga	agaagagagt	ggagcggttcg	tcagaagatc	caggaattgt	gattacgaca	360
tatgaaggac	agcatttctca	tccaagcccc	gccatattgc	gtgggtcagc	agaatcccaa	420

tcccactttt	cagatcaaag	attgaattct	cccttcactc	aaacgccatt	gatcagattc	480
cctccccacc	caatgatgat	gagtagtact	aaccagggtc	cagctgc		527

<210> 1850
 <211> 226
 <212> DNA
 <213> Pinus radiata

<400> 1850						
gagagaaggt	ggaagtacag	caatagaaa	tgacttgaaa	agtgaaaatc	ttgaagaaaa	60
agaagcgaag	gcaagtgaag	atgaagataa	gatgctgaaa	aaaccagaca	aattggtacc	120
ttgtcctcgc	tgtgacagtt	tagataccaa	attctgctat	tacaataatt	acaatgtgaa	180
ccagcctagg	catttctgta	aaaattgcc	gagatattgg	actgct		226

<210> 1851
 <211> 236
 <212> DNA
 <213> Pinus radiata

<400> 1851						
atggccggag	accacgcttg	ccccgtctgc	caagcgactt	ttactcgccc	gcaacatgtc	60
gcacgacaca	tgcgtccca	caccggcgac	cgcccgatca	agtgtcccat	ctgcaccgac	120
tcgtttggcc	gcagcgacct	cctgaagcga	catgagaaga	agatgcactc	aaacggggcag	180
agcgcagcga	gcacgcccac	tgggccaggg	cagaacaaat	ttgatagcca	gtttac	236

<210> 1852
 <211> 455
 <212> DNA
 <213> Pinus radiata

<400> 1852						
ccacaacgaa	taaatgcaaa	tgctgttctg	gatagctgaa	cccaccaact	catcagcata	60
aattttctcca	gcagaaatcc	agcctccac	tgcgcgcat	aaattttctc	aacggaaatc	120
cagccggccg	ctaaattctc	tgcactgaca	aaagcccaca	ggctaacaga	ttccgacatg	180
gatcgcccca	ttccctggcc	atctgcatac	acagaaatct	agactttgaa	aatctttcta	240
aattctgtat	ggagccctga	actgtagggtg	cagggttcga	ttaccgctat	ggatgaggcc	300
gcgcctgcc	aggctcctct	cccctgtgac	tactgtggcg	aagcgaatgc	agttctctac	360
tgccgagctg	actccgcaa	gctctgcctg	ccatgtgacc	accacgtcca	ttctgccaat	420
gcctgtcca	agaagcatgt	ccgatccag	ctctg			455

<210> 1853
 <211> 324
 <212> DNA
 <213> Pinus radiata

<400> 1853						
cttgaatgtt	gttgcattgtg	agggatcaga	aagattggaa	aggccagaaa	cttacaacaa	60
gtggcaggga	cggactcagc	gtgctggatt	tgtacagctt	cctctggatc	gtagtattct	120
ctctaaatcc	aggataaagg	taaaaacat	ttctatcata	aggattttgg	agtggacgaa	180
gatggtaatt	ggatgctatt	gggctggaag	ggaagaacta	ttcatgctct	gtctacgtgg	240
agaccttcga	catgatttgg	cgatggagaa	tttttctctc	tgcaaagagt	aaggcatgat	300
acatatttgt	gattctgcca	aggc				324

<210> 1854
 <211> 316
 <212> DNA
 <213> Pinus radiata

<400> 1854						
acgggctctc	caacaattag	gcatgattca	gcagcatgct	tggaggccac	agagaggact	60
tcccagcga	tctgtttctg	tcttacgggc	ttggctattt	gaacattttc	ttcatccgta	120

tccaaaagat	gcagacaaac	atatgctcgc	gagacagact	gggcttacca	gaaatcaggt	180
ctcaaattgg	tttataaatg	cacgtgtacg	cctctggaag	cctatgggtg	aagagatgta	240
tgtggaggaa	acaaaggagg	cagaagtaga	ccatggatca	aatgataaaa	caggtaagga	300
gagtggcgag	aaaaaa					316

<210> 1855
 <211> 393
 <212> DNA
 <213> Pinus radiata

<400> 1855						
cggaataatca	cccccttgcg	ttgcgcacca	tcgccccgac	gtaccgaagt	agcggacacg	60
gttccgtaat	attgtacagg	cgcgcgccca	ccccacagc	gacgacagac	acacattctt	120
taacgatcca	tctccttctt	gacgaaacct	ccacccccaa	cgattgacga	tgcccaaggc	180
ggacagccag	agcggatccc	gagattctac	ggtcggcccc	gctcaaggta	cgctgaagcg	240
gaaccaggcg	tgccaccaat	gtaggaagcg	gaaactgaaa	tgcgacgcca	aaagaccttg	300
ctcgacttgt	gtgaggtcac	acaaccacgc	catcacccac	gctgggtccag	acgctgtttt	360
gccgcccttc	ccagaatgta	cctttgacga	agt			393

<210> 1856
 <211> 359
 <212> DNA
 <213> Pinus radiata

<400> 1856						
ggaaagtcca	acatagaaat	cttctgtgca	ttcatagaat	aaatattcta	caggctgcac	60
tgtaatttag	gcgagaaatc	gaataaaaata	tacatttgtt	tgtttacgat	ggagttggca	120
gatgagcatt	ccatcctccg	ctataagaaa	cccaagctct	ccaagaatgt	cgtttccgag	180
cgccgcccga	ggcagaaaat	gaacaagctt	ctctacactc	tgagggctct	ggttcccaat	240
atttccaaga	tggacaaggc	atcgatttta	gcggacgcca	tcgaatatgt	ggagaagctg	300
aagcaacagg	tggagagagc	tgagtctgac	gttcaatcca	ccaacgtctc	ggctctatc	359

<210> 1857
 <211> 459
 <212> DNA
 <213> Pinus radiata

<400> 1857						
ggaaggcaat	gagagtgate	tcctcaaggg	aatgaagaag	gcaaggcgtg	agagaggatc	60
aacagcaaa	gaacggatta	gtaaaatgcc	tcctgtgtct	gctggaaaac	ggagttctat	120
ctacagagcg	gtcacaaggc	atagatggac	aggacgatat	gaagctcatc	tttgggacaa	180
aagtacttgg	aaccagaacc	aaaataaaaa	gggcaagcaa	gtgtacctag	gtgcctatga	240
tgaggaggag	gctgcagcca	gagcttatga	ccttgccgct	ctgaaatatt	gggtccttgg	300
aactctcatt	aattttcctg	ttagtgacta	tgctagagat	attgaagaga	tgacagacat	360
ttcaagggaa	gatttccctg	cttctctcag	acggaaaagt	agtgggtttt	caaggggaat	420
gtcaaaaatac	ccgtggactg	gccaaagcaat	cacaaactg			459

<210> 1858
 <211> 368
 <212> DNA
 <213> Pinus radiata

<400> 1858						
aaaaaggcgt	cagaatgggg	tgagtctgta	gtaagtacaa	gcgaaaacag	taatgacttg	60
gattcctcta	cttattctga	aacctcttcc	cctgtctcaag	gatctgatcc	tcgggttttc	120
ccctgttaatt	tctgtcaaag	naaattctac	agttctcaag	cattaggagg	tcatcaaaat	180
gcccataaagc	gtgagagaac	tttggctaga	agggcacaga	gaatggggtc	ttttgcacaa	240
agatattcaa	gcatggcatc	acttcactc	cacggttcct	cggaaaacaag	ttggacgccc	300
agtcggtttt	tagggataaa	agcacattct	ttgattcaca	aacctttccc	tgaaggatgat	360
aacctgcc						368

<210> 1859
 <211> 497
 <212> DNA
 <213> Pinus radiata

<400> 1859
 ggcaagaccg tctggaagag gatgttacgg gaagagagca aaagcgttac cgtgtctgcg 60
 acccgagct ttcggagcga accgtggttag taatgggggc agaccgcac gaatccggag 120
 tccgtctcgt gcacacgctg atggcctgcg cagaagcggg gcagcgcggg aatttgcca 180
 tcgcgcggga aatggtgaaa gaagtgagaa ttctggcttc agcacagggc ggggcaatga 240
 gcaaggtcgc cacatatattt gccgaggctc ttgccggcg aatctatggg tttctccctc 300
 aggacacctt gcggttcaac cagaacgacc cttgtccga ttttctgcaa tttcatttct 360
 accaaacctg cccctatctc aaattcgcgc acttcatagc caaccaggcc attctggatg 420
 ccttctccgg gcaccaacag gttcatgtca tagatttcaa tctgaaacag gggatccaat 480
 ggccggcctt gatacag 497

<210> 1860
 <211> 254
 <212> DNA
 <213> Pinus radiata

<400> 1860
 gagtaggagg cggcggcgga ggcaagggaa gcccgtagc aggcgtcagg atgagaaaat 60
 ggggaaaaatg ggtttctgaa gtgagggagc cgaacaagcg gtctcgcata tggctcggct 120
 cctattccac tcccagggcc gctgccaggg cctatgatac tgccgttttc tacctcagag 180
 gaccctccgc gactctcaat ttcccaggag aagcacgtaa ggagcagcag agcgacctca 240
 ggctttcgca gctc 254

<210> 1861
 <211> 515
 <212> DNA
 <213> Pinus radiata

<400> 1861
 catcttctcc ttacaaaagt agtccccc ttgactccag gcggtcttcc cagtccataa 60
 cgatacggat tacacccacg caccatgt ctccacctc atcgtattct tctccctccc 120
 ctgacacacc atcacagtct gccgtgtgc gcccgacatc taccgagac gattcttccg 180
 tcatggaacc tccacgtaag cgagccaggg ctgatcttaa cgctgaacag cgaagagagg 240
 ccagggccca ccgtaatcga attgccgctc aaaactctcg cgataaacgc aaggcgcaat 300
 tcaattacat ggagcagcgc gtggcacaac tggaggaaga gaaccaacga ctacgagcag 360
 gcatgggect ctctcaattc acgccagccg acaacgacaa gttcgtcagc ctcgagagag 420
 aatcagtaca ggcccgagag aacagagagc tcaaggagag gatcaagagt ctgagagagc 480
 ggtggtcggc cgtcatcaaa gcgttgagcag cctca 515

<210> 1862
 <211> 532
 <212> DNA
 <213> Pinus radiata

<400> 1862
 agtttgctgc tctacacctg tggttgcaag cgtttgagc ttcaagaggc aaggtttggg 60
 ctgtgattaa ttcattggcg cggcggcgac gactacgttg ggttggtcga aggtggattt 120
 gatacgggctc atgcggctgc gagagcttac gacaggcgag ctatcaagtt tcgaggagtt 180
 gaagctgata taaattttac tctaccgac tatcaagaag atttagacca gacgagcaag 240
 ctctctaaag aagagtttgt gcataattctc cgctcgtaaa gtactggttt ctctcgaggga 300
 agttccaagt atagaggcgt taccctgcac aagtgtgggc gatgggaagc cagaatgggt 360
 caattcctag gaaaaaagta tatatatattg ggattatttg acagtgaaga ggaggctgca 420
 agggcatatg ataaggctgc tatcagggtgc aatggaaagg aggcagtaac gaactttgat 480
 cctagcttat atgaaaaaga aattcttgaa gaaagaagag agagtcagac tt 532

<210> 1863

<211> 497
 <212> DNA
 <213> Pinus radiata

<400> 1863
 ggcacgagcn cttctgattt tttggccgag ggttcgttgc agaaaggcca agggcaagta 60
 ggaggcgata gacctacttg aaaatggagg tgtctgcgaa gaagcgaaag gccgaagaag 120
 cgaatggcgt ggtcgatata gccgtggaag atgctcggaa aatgttggaa cccttcaccc 180
 gagagcaact attagatatt ctgcaggagg cggcgacgca gcacctggac gtattggagc 240
 aggtgcgcgc catcgcggac aaggatcctg cgcagagaaa gctgttcgtc cgtggccttg 300
 gctgggatac aaatacacagag tctctcaagg ccctcttttc ccagttcggg gaactggagg 360
 aaggggtcgt cattatggac aagaacaccg gtaagagtaa gggttacgga ttcgttactt 420
 tcaagcacat ggacggtgct cttaatgccc taaaggagcc cagcaagaag atcgacggcc 480
 gcatgactgt cagtcag 497

<210> 1864
 <211> 308
 <212> DNA
 <213> Pinus radiata

<400> 1864
 tgcttagatg gagtttacgt ccgaaatgga gcgaatcccc ggttcaaacc ccgaggaggc 60
 caccatttat ttgacggcga tggaaatgata catgccgtga cgctgcgaca cgggaaggct 120
 agttacagtt gccggttcac ggagcccgaa aaggctcatt agcagaggaac gggcggggcg 180
 gcagttttac ccgaagccca tcgggcaact ccacggccac ggacgggctg gtgcgcctgc 240
 tgctgcatgg tgcccggggg ctctgcggga ctggtcaaca ccgggaaggg catgggcgtg 300
 gctaatac 308

<210> 1865
 <211> 395
 <212> DNA
 <213> Pinus radiata

<400> 1865
 aagcgggtgc agattgttca caatgatttc aagtggcgct ctttcttctg cagcagagat 60
 tttgaaggca tatcagctgc tcttggttgc tactcctttc aagaaaatat ctcatattat 120
 gacttatcaa acggttctta atgtagcaga gggagaaacg aggttgcaca ttgttgattt 180
 cggaattctg tatggtttcc aatggccttc tctgattcaa tgtctggcaa atcgtcctgg 240
 tggctcctccc atgcttcgca taactggaat cgagtttccc caacctggat ttagaccagc 300
 agagagaatt gaagagactg ggcgcagact ggaagactat gcaaaatctt tcggtgtgcc 360
 ctttgaatac caggctattg caacaaagtg ggaga 395

<210> 1866
 <211> 340
 <212> DNA
 <213> Pinus radiata

<400> 1866
 gttaacttga aaattgaaca cttctcaccg agcagttctg atatggaaaa actggagatc 60
 gaagagttgg ggagtcccca gggatgatga aaatctttgc ttattgaatg tgctaaagct 120
 attgcagacg gtcgtaatgc agataatttg attgcagggc tgagacaagt tgtaaatata 180
 tatggggatc cattgcatag gttagctgca tatatggtag aaggctcttg agcaagggtg 240
 catttctcag gaggacatat ttacaaaacc ctaaaatgca aggagcctac cagttccgaa 300
 ctcttttctt acatgcatat tctatatgaa gtttgtccct 340

<210> 1867
 <211> 398
 <212> DNA
 <213> Pinus radiata

<400> 1867

cttttcaaga	agtggaaaag	ggtgcaaagt	ggaacccttt	ccagaagctg	gcggccgcag	60
ttcttgatgc	ggcggaggac	accctgggtc	gtccgcttga	gaagcaacgc	ccgttgccca	120
acacatccga	ccaacgggtt	caactgtgcg	gcaacttcgc	gccggtgccg	gaaacgcnaag	180
tnaagcatga	cctggagggtc	gagggccggg	taccggagtg	cttagatgga	gtttacgtcc	240
gcaatggcgc	naatcccccg	ttcaaaccac	gcggcgccca	ccatttattt	nacggcgatg	300
gaatgataca	tgccgtgacg	ctgagacacg	ggaaggctag	ttacagttgc	cggttcacgg	360
agaccgaaag	gctcgttagc	gaggagcggg	cggggcgg			398

<210> 1868

<211> 200

<212> DNA

<213> Pinus radiata

<400> 1868

aattgcaa	cttgacag	caatcggt	atcaatgaa	agcatctcag	atttatcacc	60
catgtgct	ttctatgag	ggttttt	tgggttagga	gcgcaactg	ttctacttcg	120
gaaaaaata	tggatgcag	gcactttcct	gtaggtttct	ttaggtggga	taagagacca	180
gcaccagttg	tagcggcagc					200

<210> 1869

<211> 286

<212> DNA

<213> Pinus radiata

<400> 1869

ggatagtgca	gagcggctga	acgtggagaa	gcacttcttc	gcagagaaaa	taatggggat	60
tgtagctttt	gagggagccg	aaagaaaaat	cagactggaa	ggaagagatc	agtggcgtat	120
tgtgatggaa	tcagcgggat	tcaaattttac	caattttaagt	cattatgcaa	ggagccaagc	180
tcgaattctt	ctctataatt	attgtgaagc	gtattctcta	gatgaatcgt	cggggtttct	240
ctctttggca	tggcaaaatc	ggccctcct	caccgtcctc	agcctg		286

<210> 1870

<211> 301

<212> DNA

<213> Pinus radiata

<400> 1870

ctatacctcc	gcctcttg	aatttcaggc	tctttcttcc	tgatttttca	gacagtgtac	60
agtcgcgata	ttcacacaag	gccgccatta	tcattctatct	ttcaagaagc	agtagaccaa	120
acaagcaaaa	gcggaaaaac	tatgggaaag	aagaagagg	aggcccccaa	ggctctggtgt	180
tattactgtg	agcgcgagtt	cgntgatgaa	aagatattgg	ttcagcaccn	gaaggccaaa	240
catttcaagt	gccatgtctg	ccacaagaag	ttgtctaccc	gctggaggca	tggccatcca	300
t						301

<210> 1871

<211> 301

<212> DNA

<213> Pinus radiata

<400> 1871

ggctgcacca	ctgtagtaga	aacttttagcc	aagtggcagg	agctgaacag	ccagggtggaa	60
agctcaaaaag	atggcgcgaa	aagactcagg	aaagcccctg	ccaaagggtc	aaagaaaggt	120
tgcattgaaa	gaaagggtgg	tcttgataat	ggacgttgca	actatagagg	agtcaggcag	180
agaacgtggg	gaaaatgggt	tgcggaatc	agagaaccga	atcgtggaag	tcgactgtgg	240
ttgggtacgt	tctcttcagc	ggaggaggca	gcacgtgctt	atgatcaggc	tgcgagggtt	300
a						301

<210> 1872

<211> 447

<212> DNA

<213> Pinus radiata

<400> 1872

aagaaaccta	cttggggcaa	gagctcagcc	catgaaactt	tctgctaaaa	atgattcaaa	60
actgggtatt	gcaaggcctg	ccaagctcta	cagaggagtg	agacagaggc	actgggggaa	120
atgggtagca	gagatcagat	tacctaggaa	tagaaccagg	ctctggcttg	gaacttttga	180
cacagcagaa	gaagcagcgt	ttgcatatga	cacagcagcc	taccaactac	gtgggtgagta	240
cgcaaggctt	aattttccgg	acttgaggta	tcttttgctc	tcaaattcgg	ataacggtag	300
ccataatgtt	ctttcgccac	cgggtaaatgc	gttatctgtg	ctgaaatctt	ctgttgatgc	360
aaagctccag	gcaatttgcc	agcgtttatc	ccaggaaaat	tcttcagaaa	atcgtctgat	420
ggcacacagt	gccacaatg	aagctct				447

<210> 1873

<211> 311

<212> DNA

<213> Pinus radiata

<400> 1873

gaagatggca	gcaagggtta	caaggccgta	aatccccatc	ccaaaaaggg	cgctgcctcg	60
tggctggtgg	acatggtgga	gaaactggtg	gttgaaactt	ctgcgttgta	tagttcgaag	120
aagcctctgc	attttctttt	ggggaacttc	gctccagtct	cggaaactgc	ccccaaatcg	180
cacctgcctg	ttgttgggca	acttcctagt	tgcttggtatg	gagagttcgt	gcgcgttggt	240
cccaatccga	aattcgcacc	ggtagctggc	tatcactggt	ttgatggaga	tggaatgata	300
catggtctca	g					311

<210> 1874

<211> 383

<212> DNA

<213> Pinus radiata

<400> 1874

ttctcgcccg	ttttttccct	gcactcacca	cttccatcgc	cattgctgga	accctagaag	60
accagtctct	ttctttttta	actcaggagt	taaatcgcaa	tacaaaactc	ctgtgctgga	120
ctctattgta	tcatagtatt	cagcaagaga	ggccatgggg	cggggaaaga	tcgagctgaa	180
gaagatcgaa	agcacaagca	acaggcaggt	gacgttctcg	aagcggcgga	tggggttgct	240
taaaaaggca	caggagcttt	ccgtcttatg	cgatgcagag	gtcggcgcta	tcattttctc	300
taataccggc	agactctacg	acttctcgag	ctccagtatg	gagaagatga	ttgaaacata	360
ctatcgattt	attgaaaaaa	atg				383

<210> 1875

<211> 235

<212> DNA

<213> Pinus radiata

<400> 1875

agagattcag	gggtgtgagg	aggagatcgt	gggggaaatg	ggtagcggag	atcaggatgc	60
tccgatgccg	atcccgcgta	tgggtgggat	cctaccacac	tgcagaacag	gcagctcgtg	120
cctatgatgc	tgctcttttc	tgccctacgag	gtcctgctgc	tttctctaac	ttccctgaat	180
ctccacctgc	tcagttttctc	ccatatcccc	tgcgcctctc	tcagatatt	catct	235

<210> 1876

<211> 416

<212> DNA

<213> Pinus radiata

<400> 1876

gattgtatga	gatatcagaa	aataaaactg	attttaattc	tgcaggcatc	tcagaaaaaac	60
aaaactggct	ttactttctac	aggcatctca	gaaaataaaa	ctgggttttac	ttctgcacag	120
atgttcagaat	aacaaaactc	gttttacttt	tgcagacatc	tcagacaata	aaacttggtg	180
gttttagtac	ttgcccagac	atctgagaaa	aacaaaacgg	gttttacttc	tgcgcgcggg	240
aagggttttac	aagcttgaat	tcaaaacttta	taatcggggc	ctgtttatat	gtccaacgga	300
aatgttgagg	tcctacacac	gctgacgcgc	gagctcgtcg	ccagttataa	acgtaccatg	360

gaagccgtag ggcacccggg agggcagttt gacggaggcc acgacgtcga ggcccc 416

<210> 1877
<211> 320
<212> DNA
<213> Pinus radiata

<400> 1877

gcacaatggt	gaaggggtggg	atagaggggtc	tnatgttgat	cacaaagagt	ttctcagagg	60
gattggagg	tggagaatga	gtatgccaaa	gctctgtgat	gtttgtcagg	tatcaagctc	120
tgtaatatat	tcagagctc	atactgcaca	gctttgctta	gtctgtgatg	ctaaaattca	180
tgggtggtagc	aaggcttcgt	tgtgtcatga	aagagtttgg	gtttgtgaag	natgtgagca	240
ggccccagct	gtggttacat	gcaaggcaga	tgcagcagct	ttatgtgtag	cctgtgatac	300
tgatattcat	tctgccaatc					320

<210> 1878
<211> 456
<212> DNA
<213> Pinus radiata

<400> 1878

ctttggattt	catggggtca	tttcaactgac	tccgccgtga	aatatcacta	atttcgcttc	60
agagttttctg	caatatggcc	aaatatggag	aattttcccg	agcaggaacc	tgataatgcc	120
attgctctac	cacacgaaga	tcgcgggtcc	cgccaattta	aggggaatccg	actgcgaaaa	180
tgggggagct	gggcatctga	aatccggata	ccgagatcca	gaaagaagat	atggcttggc	240
tcatacacta	ccccggagca	ggctgcccgc	gcttacgacg	ccgcagtgta	ttgtctgaga	300
gggcgcaatg	ccgaattcaa	cttttctgtc	cctgacattc	cgactccgtc	ccccctttcc	360
cgtgagcaaa	ttcagcatgc	cgccgccgaa	tatgcgttga	gccaggcccc	ttcgagtttg	420
gcctctttca	taggttcccc	ctcgcagtcg	tcttcg			456

<210> 1879
<211> 491
<212> DNA
<213> Pinus radiata

<400> 1879

ccggagtgct	tagatggagt	ttacgtccgc	aatggcgcgga	atccccgggt	caaaccccg	60
ggcggccacc	atttatttga	cggcgatgga	atgatacatg	ccgtgacgct	gagacacggg	120
aaggctagtt	acagttgccg	gttcacggag	accgaaaggc	tcgttagcga	ggagcggg	180
gggcggagct	tttaccgaa	gcccacggg	caactccacg	gccacggcgg	gctgggtgcg	240
ctgctgctgc	atggtgccc	ggggctctgc	gggctggtca	acaccgggaa	gggcatggg	300
gtggctaattg	ccgggtctgg	cttctttaac	ggccgtctgc	tcgctatgtc	cgaagacgat	360
ctcccgatg	ccgtcagggt	gacgggtgac	ggcgatctgg	tgacgacggg	caggttcgat	420
ttcgacgggc	agcttcacgg	gtcgtcatcg	gtcaccgcgc	accccagcat	tgaccccgac	480
acgggcgagc	t					491

<210> 1880
<211> 310
<212> DNA
<213> Pinus radiata

<400> 1880

gtgagttcta	ggcatgagtt	tgcagtatcg	caaattggcct	acttacaagc	tttgaggaat	60
gctggcgcaa	cccttagaca	atttgcagaa	ttagaatcaa	tggagcttca	gaagacttca	120
ccttaccac	atcttcgcca	ttatcgggtc	accttgcccc	cttcacctcc	tcctcttccc	180
ccacctccac	cacctcctcc	tccattgtct	ctcaccctct	ctcctagtta	tggatctgca	240
acttttctct	ccagcatccc	agtcfaatcga	agcatctaca	gatgtccgta	tcagcaatgc	300
tcaccatcat						310

<210> 1881
<211> 251

<212> DNA

<213> Pinus radiata

<400> 1881

ctggntcctc	cgatctcgct	ccctgtaaca	cgccccggtc	agaaatgggtg	aaggaggagg	60
attgtaagggt	gccccaaagag	gccggaatcg	tgaaggaatt	tcaagcctgg	actatgcccc	120
agccctgcaa	cgtgtgcagg	atcgcgagcg	cttcgctcta	ttgcagggcc	gacgctgctt	180
atctctgctc	cggctgacgac	gtcaaagttc	acggcgccaa	caagctggcg	tcgcgccacg	240
agaggggtgtg	g					251

<210> 1882

<211> 351

<212> DNA

<213> Pinus radiata

<400> 1882

cacgagggcc	agagctgtgg	ctgttcccag	aagaggatat	catcagctgt	ccagtttgtc	60
ctaagagact	acagaagaag	aatatagaag	atgggtagat	ccccttgccc	cccaaaagaa	120
gcgcttaacc	gtggggcttg	gacaggcatg	gaggatacga	ttctcaccga	gtacattcga	180
gttcatggca	gtgggtggctg	gaaagctatc	tccaaaagag	caggtgagtg	tcaataaaaa	240
tttaatatgca	attcttttta	ttagcagaag	gaagtagcaa	tctcccaggt	tatatataac	300
aattcatcag	tcatatatat	cagaaattta	tagtcgagtc	taagaggag	a	351

<210> 1883

<211> 450

<212> DNA

<213> Pinus radiata

<400> 1883

tcccttatca	cagaatagaa	actgatggct	agtcagatcc	cagaatgaac	cctctaaatt	60
aaatgtagcc	cgcttagaac	attagaagaa	gcaaaagcaa	acattcatga	tcaataaatg	120
tagattaaaa	ccaccggcat	tgatgtgtag	tagaagttga	atatggtcag	gcatacttgt	180
tctgtttgct	gtggctgggt	tcaagttcgt	agagctttcc	tcggccagaa	aaaacgatga	240
gcgccacctc	tgcacgcac	agcactgaaa	gctcgaaggc	tttcttcac	agaccgcctc	300
ggcgcttcca	gaaggtcacc	tgccctgcga	cgctattctc	gatcttcttg	gtttctatct	360
taccgcgccc	catcttcagc	aaaatcccaa	aatctgagta	tgggcaggcg	ttgaacttaa	420
atttgcctcta	tgaacagaat	taccgagctt				450

<210> 1884

<211> 386

<212> DNA

<213> Pinus radiata

<400> 1884

aaatgatcag	aggcggttct	ccagttattc	acaacaaaga	aaagggtccc	cgcttcgggc	60
ttctgcccac	atatgcttct	gacgagagtg	agctgaaatg	gatcgaggtc	ccggattgct	120
tctgctttca	tctctggaac	gcctgggaag	aaggagaaga	cgaggttgct	gtcatcggtc	180
cctgtatgac	cccgcgggac	gccattttca	acgaatctga	cagcgcgctg	cggagtgttc	240
tgctcgaaat	tcggctcaat	ctcaaaaccg	gcttgctccac	cagacgcgag	atcacgccga	300
tgaatctcga	gagtacttct	agagcgggcg	cgggcccac	gattttccac	ccgggtgggg	360
taccaggtaa	gtgtacccaa	ttcgcc				386

<210> 1885

<211> 190

<212> DNA

<213> Pinus radiata

<400> 1885

aaatgatcag	aggcggttct	ccagttattc	acaacaaaga	aaagggtccc	cgcttcgggc	60
ttctgcccac	atatgcttct	gacgagagtg	agctgaaatg	gatcgaggtc	ccggattgct	120
tctgctttca	tctctggaac	gcctgggaag	aaggagaaga	cgaggttgct	gtcatcggtc	180

cctgtatgac 190

<210> 1886
<211> 412
<212> DNA
<213> Pinus radiata

<400> 1886
 ggtcccagcc gccttcnngg gcggttcgtgc cgcaagatat gcttctgacg agagtgaagct 60
 gaaatggntc gaggtcccgg attgcntctg cnttcatctc tggaacgcct gggaagaagg 120
 agaagacgag gttgtcgtca tcggctcctg tatgaccccg ccggacgcca ttttcaacga 180
 atctgacagc gcgctgcgga gtgttctgtc ggaaattcgg ctcaatctca aaaccggctt 240
 gtccaccaga cgcgagatca cgccgatgaa tctcgagagt acttctagag cggccgcggg 300
 cccatcgatt ttccaccccg gtgggggtacc aggttaagtgt acccaattcg ccctatacgt 360
 gagtcgtatt acaattcacc tggcgcgtcgt tttacaaccg ncntgactgg ga 412

<210> 1887
<211> 329
<212> DNA
<213> Pinus radiata

<400> 1887
 atcagaaggc ggttctccag ttattcacaa caaagaaaag gtcccgcgct tcgggcttct 60
 gcccaaatat gcttctgacg agagtgaagct gaaatggatc gaggtcccgg attgcttctg 120
 ctttcatctc tggaacgcct gggaagaagg agaagacgag gttgtcgtca tcggctcctg 180
 tatgaccccg ccggacgcca ttttcaacga atctgacagc gcgctgcgga gtgttctgtc 240
 ggaaattcgg ctcaatctca aaaccggctt gtccaccaga cgcgagatca cgccgatgaa 300
 tctcgagagt acttctagaa gcgcccgccg 329

<210> 1888
<211> 101
<212> DNA
<213> Pinus radiata

<400> 1888
 aaatgatcag aggcgggttct ccagttattc acaacaaaga aaagggtccc cgcttcgggc 60
 ttctgcccaa atatgcttct gacgagagtg agctgaaatg g 101

<210> 1889
<211> 326
<212> DNA
<213> Pinus radiata

<400> 1889
 atgatcagag gcggttctcc agttattcac aacaaagaaa aggtcccgcg cttcgggctt 60
 ctgccc aaat atgcttctna cgagagtga ctgaaatgga tcgaggtccc ggattgcttc 120
 tgctttcatc tctggaacgc ctgggaagaa ggagaagacg aggttgtcgt catcggtctc 180
 tgtatgaccc cgctggacgc cattttcaac gaatctgaca gcgcgctgcg gagtgttctg 240
 tcggaaattc ggctcaatct caaaaccggc ttgtccacca gacgcgagat cacgccgatg 300
 aatctcgaga gtacttctag agcggg 326

<210> 1890
<211> 246
<212> DNA
<213> Pinus radiata

<400> 1890
 agctgaaatg gatcgacgtc ccgattgct tctgctttca tctctggaac gcctgggaag 60
 aaggagaaga cgaggttgct gtcacgtgct cctgtatgac cccgccggac gccattttca 120
 acgaatctga cagcgcgctg cggagtgttc tgtcggaat tcggctcaat ctcaaaaccg 180
 gcttgtccac cagacgcgag atcacgccga tgaatctcga gactacttct agagcggccg 240

cggggc 246

<210> 1891
 <211> 238
 <212> DNA
 <213> Pinus radiata

<400> 1891
 aaatgatcag aggcggttct ccagttattc acaacaaaga aaagggtcccg cgcttcgggc 60
 ttctgcccac atattgcttct gacgagagtg agctgaaatg gatcgaggtc ccggattgct 120
 tctgctttca tctctggaac gcctgggaag aaggagaaga cgaggttgtc gtcacgggt 180
 cctgtatgac ccgcgcggac gccattttca acgaatctga cagcgcgctg cggagtgt 238

<210> 1892
 <211> 349
 <212> DNA
 <213> Pinus radiata

<400> 1892
 tgtaccggaa aattccaaac aaataatcaa ccatggactc atattgccgg agatgggctc 60
 agtggacagc gggcgcggaag gcacgagagc aattttgtcc gatgattgtg tgaaattcga 120
 atgccgatat tgttgtaggg ttttcccgac gtctcaggct ctccggcgcc accagaacgc 180
 ccataaacga gaacggcgcc gggcaatgac gaggtttcag agatcgccct ctgacagttc 240
 aaactattca ggaaaacaga atagtattga tctgttttagc cgtgagagag ttcccgggtc 300
 ttctctcctt tcaccacacg gtacgagggga tcatgttggt tgcagtgc 349

<210> 1893
 <211> 417
 <212> DNA
 <213> Pinus radiata

<400> 1893
 gaagaagaag aagaagaaag ccccggtggt tcagggcgaa tgagccgtag cgcctcagaa 60
 tgggccttcc agaagtttct cagttttgat gggtccaaga ttccgtcaga agatggagaa 120
 ggcgaacaga agcctctcgg tgttaaagat cctctgcttc acggtcatat ggacaacgct 180
 cctgcggcgc tcagtcctct ctttgccgaa gtcaaggatg aggttcttct tctactgac 240
 cctcgagatt acgaggcctt cctcaagcgg aggccttaacc ttgcctgcgc ggcagtcgcc 300
 ttactcggg ttacaggaat tagctctcca ggccctggct cctcaacagt ggatgcaaac 360
 caatctcaga acacttttagg atcagaaaaga gtgcacggtt ggtatcccaa tcttccg 417

<210> 1894
 <211> 456
 <212> DNA
 <213> Pinus radiata

<400> 1894
 ggaaggcaat gagagtgatc tcctcaaggg aatgaagaag gcaaggcgtg agagaggatc 60
 aacagcaaag gaacggatta gtaaaatgcc tccctgtgct gctggaaaac ggagttctat 120
 ctacagaggc gtcacaaggc atagatggac aggacgatat gaagctcatc tttgggacaa 180
 aagtacttgg aaccagaacc aaaataaaaaa gggcaagcaa gtgtacctag gtgcctatga 240
 tgaggaggag gctgcagcca gagcttatga ccttgccgct ctgaaatatt ggggtcctgg 300
 aactctcatt aattttcctg ttagtgacta tgctagagat attgaagaga tgcagagcat 360
 ttcaaggga gatttcctgg cttctctcag acggaaaagt agtgggtttt caaggggaat 420
 gtcaaaaatac cgtggactgc caagcaatca caaact 456

<210> 1895
 <211> 456
 <212> DNA
 <213> Eucalyptus grandis

<400> 1895

ggaaggcaat	gagagtgatc	tcctcaaggg	aatgaagaag	gcaaggcgtg	agagaggatc	60
aacagcaaag	gaacggatta	gtaaaatgcc	tcctgtgct	gctggaaaac	ggagttctat	120
ctacagaggg	gtcacaaagg	atagatggac	aggacgatat	gaagctcatc	tttgggacaa	180
aagtacttgg	aaccagaacc	aaaataaaaa	gggcaagcaa	gtgtacctag	gtgcctatga	240
tgaggaggag	gctgcagcca	gagcttatga	ccttgccgct	ctgaaatatt	ggggtcctgg	300
aactctcatt	aattttcctg	ttagtgacta	tgctagagat	attgaagaga	tgcagagcat	360
ttcaagggaa	gatttcctgg	cttctctcag	acggaaaagt	agtgggtttt	caaggggaat	420
gtcaaaaatac	cgtggactgc	caagcaatca	caaact			456

<210> 1896

<211> 388

<212> DNA

<213> Eucalyptus grandis

<400> 1896

gtaaatacaat	acctgggtcag	catcctaatt	tagcattcaa	tgttggcagt	attagatcca	60
accagcagca	gcttcagcaa	cagcatgatc	tgccccctct	ccccaaagcca	gcaacaatgc	120
cttttgctc	ttcagtaagt	atagcaaata	attcccagat	gcctggttta	gggtcaagag	180
gggtaaatcag	gatgacagat	gcatccatca	aaagttcctt	agctcaaggt	gggtgggctgc	240
agactggagt	tggcatgact	gggttagaca	ctaggggagt	tgctcttcag	acagtatctc	300
ctgctaacca	tatatctccg	gatgtaatct	ctaggaacac	gatggattcg	tcttcactct	360
caccagttcc	ttatccgttt	ggccgggg				388

<210> 1897

<211> 202

<212> DNA

<213> Eucalyptus grandis

<400> 1897

atgcgaaaca	tgctcaaaca	cccccaacat	catgggaagg	tggaagtggg	gctgattcgg	60
aggttaacat	gttgaaggat	tacgtttcag	aggactggat	tacaggtggt	gaccgcttcc	120
ggttgagctt	ggttgaattt	cttgataagt	tgaataagta	tgcggagtcc	tctgttcata	180
tgtacgtgtc	ccttgaaaag	gc				202

<210> 1898

<211> 289

<212> DNA

<213> Eucalyptus grandis

<400> 1898

gttgaatggg	gattcaaaca	atggcttcac	aaggcggcgg	cggcagcagc	ggtaatgcc	60
gaggtggcgg	tggcaataat	ggaaaatcca	ctgaagtcca	gccattgact	cggcagaatt	120
caatatacag	tctcactctt	gatgaggttc	aaaaccagtt	aggtgattta	gggaagccat	180
tgagcagcat	gaacctggac	gagcttttga	agaatgtctg	gacagctgag	gccggtcagt	240
caatgtttat	ggatgttgag	ggcacggctg	tggctaataca	aaatgctct		289

<210> 1899

<211> 477

<212> DNA

<213> Eucalyptus grandis

<400> 1899

cttgaaatcg	ggcgtgcccc	gctcgatcgc	agcttcaagc	agctcaaaaa	gactgtatat	60
cactcgacga	gtgtgctgag	cacattgagc	togagctggt	catcaaagcc	gccattggca	120
gtgaagtacc	agctcaaccc	cggctcactc	actgaatcag	atgattcaaa	gagcctctgc	180
tccactctgg	acaagctctt	ggcttgggag	aagaagctct	atgaggaagt	gaaggctaga	240
gaaggtgaga	agatagagca	tgaaaagaag	ttgtcagtac	ttcagagcca	ggaaggcaag	300
ggagaagatg	aaaccaaggt	agacaagacc	aaggcctcat	taaataagtt	gcaagcacta	360
atagctgtta	cgtcggaggc	tgtctctaca	acttcaaagt	caattattgg	cctcagagac	420
agtagacttg	tcccgcagct	tgttgaaactc	tgccatgggt	tcatgtacat	gtggagg	477

<210> 1900
 <211> 1243
 <212> DNA
 <213> Eucalyptus grandis

<400> 1900
 ccccccctctt cctcagtcag ccagtcctctc tctctctctc tctcacatct ctagtttcag 60
 ccttttttcct ccatttggcc aagcagcgcc cgccgcgcga ccggaaggct tccggatctg 120
 gtgctcggtt ctattccgctc cgctcgatagg aggctaggct acgctgaaag aagttgatga 180
 gcgcgaatttc actgatggag tggaatgcga aacctcctct gcagtgaggaa tgggagaatc 240
 ttatgatgtt cgggtcaaaa gcgactgaaa cctctaagcc gctgcgagcg actgattggg 300
 gaatcgaggc ggaggagctg attgaccccg ggtccttatt tctgtatgag aatgggtggcg 360
 gcagcagcag ttgtaccagc attgatccgg gttacacttc tgtgtccaag agctcgaaat 420
 cggcttctgt caattcttctg tctacggacg aattgaaaat ctcgaaattc tctgtggagg 480
 cgcatgaagg cttttctctg cagagtagca agaaaagaatt ggcgggtgaat gattttaccg 540
 gaatgtcacc ggcaactcgag ccttcgggtc gctctggtga gccactgctc agtctaaagc 600
 tcggtaaaaag gatatatttt gaaaatacta ttgacaagga tcatgtgaag acccaagacc 660
 ttccttcgggt catgaaatca cctgatactc cagcaaagag aaacaaatcc aactgtcagg 720
 gtacgtccgc cccacgctgc caagttgaag gctgtaacct tgacctctct ttagctaaag 780
 attaccaccg caagcataga gtttgtgaga gtcactctaa atgccctaag gtcacgtcga 840
 gtgggtataga gcgtcggttt tgtcagcaat gcagcaggtt tcatgggcta tctgagtttg 900
 atgaaaagaa gcgtagctgt cgcaagcgcc tatctgatca caatgcaaga cgtcgcaagc 960
 ccccgccaga tgtgaccagc ttgaatccgg ctgactgtc tgcactgttt tatgggtggga 1020
 tgcagcagtt gaatccagtc ttgagcagag ctccagctat ccacaccagg tctactgcta 1080
 gtttttaaatg ggcagataca caggacacta agctcataga gaaaggtccg aagcttccaa 1140
 taggcggagg tgttggtgag tgtatcacta tcccaagcaa tgggataccg gacaccctca 1200
 agtccactgg attgggcaaa agctataacg aacttctatc atc 1243

<210> 1901
 <211> 366
 <212> DNA
 <213> Eucalyptus grandis

<400> 1901
 aaaaagtata tatacctcgg cctattttgat agtgaagtag aggcagcaag ggcgtatgac 60
 aaggcagcta tcaaatgtaa tggaagagag gctgtgacca actttgaacc tagtacgtac 120
 gatggagaga tgattgcaa agccagcaat gaaaatagca tctatggtga ccatggtctt 180
 gatctcaatc tcgggatatc agcttcttcc aggggaatgg tggaaacctt agagccctcg 240
 gacgacatgc gtcaggggaag tagtttaagg gtaggaaact ctgctgcata ctgggggtgat 300
 ccactctgtt aaggtttatc gatgacatct ggacaacctc tccttgacgg gtgtttatcc 360
 taccgt 366

<210> 1902
 <211> 466
 <212> DNA
 <213> Pinus radiata

<400> 1902
 ttaattcatg gcggcgggcg cgacgactac gttgggttgt gcgaagggtg atttgatacg 60
 gctcatgcgg ctgcgagagc ttacgacagg gcagctatca agtttcgagg agttgaagct 120
 gatataaatt ttactctcac cgactatcaa gaagatttag accagacgag caagctctct 180
 aaagaagagt ttgtgcatat tctccgtcgt caaagtactg gtttctctcg tggaagttcc 240
 aagtatagag gcgttaccct gcacaagtgt gggcgatggg aagccagaat gggccaattc 300
 ctaggaaaaa agtatatata tttgggatta tttgacagtg aagaggaggc tgcaagggca 360
 tatgataagg ctgctatcag gtgcaatgga aaggaggcag taacgaactt tgatcctagc 420
 ttatatgaaa aagaaattct tgaagaaaga agagagagtc agactt 466

<210> 1903
 <211> 240
 <212> DNA
 <213> Pinus radiata

<400> 1903
 gcttattgga atgcctgaca ctaactatgg aagcgaacag acaaatgctt gcaaaaaaca 60
 gaaaagaata cgttccaagg attcaggaga agatggtgaa gatagacaga gagaacatcc 120
 tttcattggt actgagcccg gtgaacttgc aagagggaaa aagaatgggt tagactatct 180
 ctttgatctt tatgaacagt gcgggaaatt tctgctggat gtgcaacata ttgcaagga 240

<210> 1904
 <211> 495
 <212> DNA
 <213> Pinus radiata

<400> 1904
 gccatggcaa tagattttgc aggacgggaa tctcctcgtg tgcaggctcg cagatacccc 60
 attgccaggc cgaggggtgt aaggcaaaact tgagcagtgc caaacactac catcgccggc 120
 ataagggttg tgaattgcac tcgaaggcct ctactgttat tgtgggtggg ttcatcagc 180
 ggttctgcca acaatgtagc agatttcacg caagatctga attcgacgag ggaaaacgaa 240
 gctgcagaaa gcgccttgct gaccacaaca gacgaaggag aaaacctcag ccaagtacat 300
 gtgttacatc acaatctcag gctgggacaa cagggtttag aaatgataac cagacaacta 360
 aaggatcatc aggtcacatt acaacggctg ttcagaatac accgaacatt agcagaagca 420
 ctagtagtac tagtccgtcc ttgattacat cagtaccgat gatgatgttc ccaataact 480
 ataaaggaca tagtc 495

<210> 1905
 <211> 377
 <212> DNA
 <213> Eucalyptus grandis

<400> 1905
 taacactaca ttcacacccc caaacagcaa acggatcatc tcgcacaatc catcaagtgt 60
 agatcgaccg gcggaatctg cagcactggc aaagaggatg aggagggctc acattcagaa 120
 tatagcggga gattgcaact tgaaagacag attacatata caaagtggaa tcacatatag 180
 tcagcaacaa agagctccct tttccacatt ggcgacgaac ttccgcacta gcaattcgcc 240
 cccccagcaa tctgaaagca accaaaaaga agccaccgat gatgctcatg gcaccaacgt 300
 ccaaggaaaca tttcttaaaa aggatgatcc aaaagtact gctctgattc aacaagccga 360
 gctgctcagt tccttgc 377

<210> 1906
 <211> 377
 <212> DNA
 <213> Eucalyptus grandis

<400> 1906
 gtgatttttag tgctcgatac tttgaaaagg gcatcaatac agtcaaacga gataaaaaaga 60
 cataacatgc aaaactcaat acatgattct cagaaaaagac catcatcttt aattcagtca 120
 aacgaggctg tttttacgca aacttcggtc ataagctgtg ccttgcaatc gtttgtaaaa 180
 cctccaaatg ctaaggtcac gggtcacattc ctctctgatc tttgagcagc tcatggcacc 240
 aacgtccaag gaacatttct taaaaaggat gatccaaaag ttactgctct gattcaacaa 300
 gccgagctgc tcagttccct tgcggtgaaa gtcaatgcag ataacatgga ccagagtctt 360
 gaaaatgctt ggaagg 377

<210> 1907
 <211> 1668
 <212> DNA
 <213> Pinus radiata

<400> 1907
 agctgtaagc tacctacgaa gtggaatcga agagagagag agtgagaggc taactaataa 60
 gatgaatatg aagattcgaa cctccgacac cagtactcct gatgatcagc aacagcatag 120
 cggcgccgtg aaagtggcga ttccggccgt gtcgggggat tcggggacga ttgggttaaa 180
 gctgggcaag cggacctatt ttgaggcggt gaaggcaatt ccgacagcga tcccccgcc 240

gtcttgcgtt	ccggctgcc	agaagcagca	gtctgcgttg	cagggaaacgc	atatggtgcc	300
gcggtgtcag	gtggaggat	gcgagatgga	actcaccgcc	gcaaaggact	accaccgccg	360
ccacaaggtc	tgcgagctcc	actccaagtt	tcccaaggtc	atcgtcaacg	ggatcgagca	420
gcgcttctgt	cagcaatgta	gcaggtttca	tacgttgtct	gagtttgatg	aagggaagcg	480
gagctgtcgg	aggcgtctag	ctggccacaa	ccagcgcgct	aggaaacccc	aacttaattc	540
aacggcgatg	aaagctgcaa	gatttgcttc	cactttctat	gatgacgggc	gacttagcag	600
catcctgatg	gctagatcac	ctttcatgca	tccacggata	gcttcaaact	tggaggagaa	660
ttcgctcgat	ttcaaacttg	gaggatatgg	aaaaggagct	tggccgagga	ttaaggctga	720
ggatgtatca	tcatatgatg	ggcaattatc	aaccaaatac	cctctcccgt	cataatgctg	780
aaagattgct	tttcctttta	cagggttcta	agactgtacc	tgggtggagct	attaatcaaa	840
gcactcatca	gtacaggcaa	agctccaggg	atcatgtggg	ccaatccttg	accttgctcat	900
cctgctcggg	agaaaatcta	acaggtttaa	atgttatatg	tgccccacat	ggtttatcag	960
gagctctcga	ctctggctgt	gcgcactagc	ttctgtcaat	tcaatccggg	ggcccaaggt	1020
cctcaggatc	agcttcattt	gatatgacca	cgcggtcagg	tctcacaatg	gatcaactta	1080
tactagagga	tcaacctctt	atggctcaag	caccattgat	gcaaggagta	caacacaact	1140
ttggtcattt	tgcagaagac	aagttactaa	caatgtatcc	ccagtctctt	actaatcttg	1200
caacagggtg	gttccttgca	gctactgtga	attctatgga	taagcagcac	caaggctatc	1260
cactcgtttc	cgatgcaggc	caaattgtaa	actttggagg	aaatatattt	ggcttgctgc	1320
aggggagcag	tttcagaggc	tctcaagctg	caagttcaca	agatattcaa	ggcaccatag	1380
atctgatgtg	cacgtcctcg	gaaacacaaa	ctaattgatc	tcatgatcaa	cttggcatgg	1440
tgcaccaggg	aagttaaagc	tttactgact	tgcagttggt	gaggtctttt	gaatcatcta	1500
tttatgacac	tcatcaactg	ctgtagctct	aatctgggtg	ttcttcgggc	atgttttctt	1560
tgccttcaga	cttgaagata	actgttaaaa	cttcattatg	acaattatct	gtaccctcta	1620
aatgcagaca	attgctttca	attacccttg	cttattttcaa	aaaaaaaa		1668

<210> 1908

<211> 821

<212> DNA

<213> Eucalyptus grandis

<400> 1908

ctctctctct	ctctctctct	ctctttcttt	ctttctttct	ctctctagca	gaggcacaga	60
ggcgcgca	gggcactgat	gatgacgact	gggtagctc	caatgaatgg	gctctagaga	120
acctcgctca	tggacgtggg	ttcgggctcg	tggacgacgg	agtcggggtc	ctcttctcct	180
ccccctctcg	agtcctctca	cggcctcaag	ttcgccaga	aaatctactt	ccagaataat	240
aacagtagta	ataatgccgc	cgcacccaag	aacggctccg	gctcgggctc	cggctcctcc	300
tccgccgcgc	cgcccgcgcc	cgggtcgggc	acgccccga	agaaggtag	ggcctccgcc	360
ggcgggcgcg	gctgcggggc	gatccagggc	gggcagcccc	cgagggtgcca	ggtggaaggc	420
tgcggggtgg	atctgagcga	tgccaaggct	tactattcca	ggcacaagg	gtgcggcatg	480
cactccaagt	ccgccaccgt	categtcgcc	ggcatcgagc	agagggttctg	ccagcagtgc	540
agcagatttc	atcagcttac	tgaatttgac	caagggaaaac	gaagctgtcg	tagacgtttg	600
gctggtcaca	atgagcgccg	gaggaagccc	ccacctgggt	cgctactatc	ctctcgctat	660
gggcgactgc	aatcctctat	atctgagaac	accaccagag	tgggtagttt	tctgatggat	720
ttcacagcat	accgaagca	tgcattggtc	gcgccacgtt	tttctgagcg	cacgacacct	780
ggagatctag	tccccggacc	aggaaaggtc	tatcctcatc	c		821

<210> 1909

<211> 105

<212> DNA

<213> Eucalyptus grandis

<400> 1909

gggaagagga	gcgtagagtg	ggattcgaac	gattggaagt	gggacgggtg	tctgttcgtc	60
gctaggccgc	tgaacccggg	ccgctccgat	ttccccggcc	ggcag		105

<210> 1910

<211> 338

<212> DNA

<213> Pinus radiata

<400> 1910

cagaagagac	ctgccatgga	aacacatttt	gcaggacaga	aatttcatca	ttcacaggct	60
cacagatacc	ccagtgccag	tccgagggtt	gtaaagcaaa	cttgagcagt	gccaaacact	120
accatcgccg	acataaagtt	tgcgaattcc	actctaaggc	tcttacggtc	gttggtggcg	180
gtcagattca	gcggttttgc	caacagtgtg	gtagatttca	tcagacatct	gaatttgacg	240
gaggaaagcg	gagctgcaga	aagcgccttg	ctgaccacaa	cagacgccgg	cggaaaccta	300
aaccgagtc	atgtactaca	tcccaatgtc	aggcaggg			338

<210> 1911
 <211> 465
 <212> DNA
 <213> Pinus radiata

<400> 1911						
tgcacatggt	cctttgcatt	ttcttgaaga	agctgtgatt	gttcgaccga	cacgttactc	60
attcacattg	cctctccatc	tccttcaatc	aggattccag	aattgcccgt	cgaaatggat	120
gaagtccaag	tcaaggtcga	cattcagagc	acaaatgtca	gtgccgacga	gcccaggcct	180
gcgaagcgcc	agggtttcga	gctcgccaag	agccctgaaa	acgtggcttc	gaaatccact	240
gcgctctcct	ctccgaaaaa	acccaaagct	gcttcttctc	cttcttcttc	gtcgccgaga	300
gcgcagcctc	ccgcttgcca	ggtggagaaa	tgcgcggcgg	atcttgctga	tgccaaagag	360
tactatagga	ggcacagggt	ttgcgagcaa	cattcaaagg	ctcgaattgt	gctcgttctt	420
ggcctccagc	aacgcttctg	ccagcaatgt	agcagattcc	atgtg		465

<210> 1912
 <211> 509
 <212> DNA
 <213> Pinus radiata

<400> 1912						
ctccttacaa	aagtagctcc	cctcttgact	ccaggcggtc	ttcccagtc	ataacgatac	60
ggattacacc	cacgcacccc	atgtcttcca	cctcatcgta	ttcttctccc	ttccctgaca	120
caccatcaca	gtctgccgct	gtgcgcccga	catctaccgc	agacgattct	tcgctcatgg	180
aacctccacg	taagcgagcc	agggctgatc	ttaacgctga	acagcgaaga	gaggccaggg	240
cccaccgtaa	tcgaattgcc	gctcaaaaact	ctcgcgataa	acgcaaggcg	caattcactt	300
acatggagca	gcgcgtggca	caactggagg	aagagaacca	acgactacga	gcaggcatgg	360
gcctctctca	attcacgcca	gccgacaacg	acaagttcgt	cagcctcgag	agagaatcag	420
tacaggcccg	cgagaacaga	gagctcaagg	agaggatcaa	gagtcctagag	agcgggtggg	480
cggccgtcat	caaagcggtg	caggcctca				509

<210> 1913
 <211> 151
 <212> PRT
 <213> Pinus radiata

<400> 1913	
Glu Gly Asn Glu Ser Asp Leu Leu Lys Gly Met Lys Lys Ala Arg Arg	
1 5 10 15	
Glu Arg Gly Ser Thr Ala Lys Glu Arg Ile Ser Lys Met Pro Pro Cys	
20 25 30	
Ala Ala Gly Lys Arg Ser Ser Ile Tyr Arg Gly Val Thr Arg His Arg	
35 40 45	
Trp Thr Gly Arg Tyr Glu Ala His Leu Trp Asp Lys Ser Thr Trp Asn	
50 55 60	
Gln Asn Gln Asn Lys Lys Gly Lys Gln Val Tyr Leu Gly Ala Tyr Asp	
65 70 75 80	
Glu Glu Glu Ala Ala Ala Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr	
85 90 95	
Trp Gly Pro Gly Thr Leu Ile Asn Phe Pro Val Ser Asp Tyr Ala Arg	
100 105 110	
Asp Ile Glu Glu Met Gln Ser Ile Ser Arg Glu Asp Phe Leu Ala Ser	
115 120 125	
Leu Arg Arg Lys Ser Ser Gly Phe Ser Arg Gly Met Ser Lys Tyr Arg	

130 135 140
 Gly Leu Pro Ser Asn His Lys
 145 150

<210> 1914
 <211> 128
 <212> PRT
 <213> Eucalyptus grandis

<400> 1914
 Lys Ser Ile Pro Gly Gln His Pro Asn Leu Ala Phe Asn Val Gly Ser
 1 5 10 15
 Ile Arg Ser Asn Gln Gln Gln Leu Gln Gln Gln His Asp Leu Pro Leu
 20 25 30
 Leu Pro Lys Pro Ala Thr Met Pro Phe Ala Ser Ser Val Ser Ile Ala
 35 40 45
 Asn Asn Ser Gln Met Pro Gly Leu Gly Ser Arg Gly Val Ile Arg Met
 50 55 60
 Thr Asp Ala Ser Ile Lys Ser Ser Leu Ala Gln Gly Gly Gly Leu Gln
 65 70 75 80
 Thr Gly Val Gly Met Thr Gly Leu Asp Thr Arg Gly Val Ala Leu Gln
 85 90 95
 Thr Val Ser Pro Ala Asn His Ile Ser Pro Asp Val Ile Ser Arg Asn
 100 105 110
 Thr Met Asp Ser Ser Ser Leu Ser Pro Val Pro Tyr Pro Phe Gly Arg
 115 120 125

<210> 1915
 <211> 66
 <212> PRT
 <213> Eucalyptus grandis

<400> 1915
 Ala Lys His Ala Gln Thr Pro Pro Thr Ser Trp Glu Gly Gly Ser Gly
 1 5 10 15
 Ala Asp Ser Glu Val Asn Met Leu Lys Asp Tyr Ala Ser Glu Asp Trp
 20 25 30
 Ile Thr Gly Val Asp Arg Phe Arg Leu Ser Leu Val Glu Phe Leu Asp
 35 40 45
 Lys Leu Asn Lys Tyr Ala Glu Ser Ser Val His Met Tyr Val Ser Leu
 50 55 60
 Glu Lys
 65

<210> 1916
 <211> 89
 <212> PRT
 <213> Eucalyptus grandis

<400> 1916
 Met Ala Ser Gln Gly Gly Gly Gly Ser Ser Gly Asn Ala Arg Gly Gly
 1 5 10 15
 Gly Gly Asn Asn Gly Lys Ser Thr Glu Val Gln Pro Leu Thr Arg Gln
 20 25 30
 Asn Ser Ile Tyr Ser Leu Thr Leu Asp Glu Val Gln Asn Gln Leu Gly
 35 40 45
 Asp Leu Gly Lys Pro Leu Ser Ser Met Asn Leu Asp Glu Leu Leu Lys
 50 55 60
 Asn Val Trp Thr Ala Glu Ala Gly Gln Ser Met Phe Met Asp Val Glu
 65 70 75 80
 Gly Thr Ala Val Ala Asn Gln Asn Ala

85

<210> 1917
 <211> 159
 <212> PRT
 <213> Eucalyptus grandis

<400> 1917
 Leu Glu Ile Gly Arg Ala Gln Leu Asp Arg Ser Phe Lys Gln Leu Lys
 1 5 10 15
 Lys Thr Val Tyr His Ser Thr Ser Val Leu Ser Thr Leu Ser Ser Ser
 20 25 30
 Trp Ser Ser Lys Pro Pro Leu Ala Val Lys Tyr Gln Leu Asn Pro Gly
 35 40 45
 Ser Leu Thr Glu Ser Asp Asp Ser Lys Ser Leu Cys Ser Thr Leu Asp
 50 55 60
 Lys Leu Leu Ala Trp Glu Lys Lys Leu Tyr Glu Glu Val Lys Ala Arg
 65 70 75 80
 Glu Gly Glu Lys Ile Glu His Glu Lys Lys Leu Ser Val Leu Gln Ser
 85 90 95
 Gln Glu Gly Lys Gly Glu Asp Glu Thr Lys Val Asp Lys Thr Lys Ala
 100 105 110
 Ser Leu Asn Lys Leu Gln Ala Leu Ile Ala Val Thr Ser Glu Ala Val
 115 120 125
 Ser Thr Thr Ser Asn Ala Ile Ile Gly Leu Arg Asp Ser Arg Leu Val
 130 135 140
 Pro Gln Leu Val Glu Leu Cys His Gly Phe Met Tyr Met Trp Arg
 145 150 155

<210> 1918
 <211> 349
 <212> PRT
 <213> Eucalyptus grandis

<400> 1918
 Met Glu Trp Asn Ala Lys Pro Pro Leu Gln Trp Glu Trp Glu Asn Leu
 1 5 10 15
 Met Met Phe Gly Ser Lys Ala Thr Glu Thr Ser Lys Pro Leu Arg Ala
 20 25 30
 Thr Asp Trp Gly Ile Glu Ala Glu Glu Leu Ile Asp Pro Gly Ser Leu
 35 40 45
 Phe Leu Tyr Glu Asn Gly Gly Gly Ser Ser Ser Cys Thr Ser Ile Asp
 50 55 60
 Pro Gly Tyr Thr Ser Val Ser Lys Ser Ser Lys Ser Ala Ser Val Asn
 65 70 75 80
 Ser Ser Ser Thr Asp Glu Leu Lys Ile Ser Lys Phe Ser Val Glu Ala
 85 90 95
 His Glu Gly Phe Ser Leu Gln Ser Ser Lys Lys Glu Leu Ala Val Asn
 100 105 110
 Asp Phe Thr Gly Met Ser Pro Ala Leu Glu Pro Ser Val Cys Ser Gly
 115 120 125
 Glu Pro Leu Leu Ser Leu Lys Leu Gly Lys Arg Ile Tyr Phe Glu Asn
 130 135 140
 Thr Ile Asp Lys Asp His Val Lys Thr Gln Asp Leu Pro Ser Val Met
 145 150 155 160
 Lys Ser Pro Asp Thr Pro Ala Lys Arg Asn Lys Ser Asn Cys Gln Gly
 165 170 175
 Thr Ser Ala Pro Arg Cys Gln Val Glu Gly Cys Asn Leu Asp Leu Ser
 180 185 190
 Ser Ala Lys Asp Tyr His Arg Lys His Arg Val Cys Glu Ser His Ser
 195 200 205

Lys Cys Pro Lys Val Ile Val Ser Gly Ile Glu Arg Arg Phe Cys Gln
 210 215 220
 Gln Cys Ser Arg Phe His Gly Leu Ser Glu Phe Asp Glu Lys Lys Arg
 225 230 235 240
 Ser Cys Arg Lys Arg Leu Ser Asp His Asn Ala Arg Arg Arg Lys Pro
 245 250 255
 Pro Pro Asp Val Thr Gln Leu Asn Pro Ala Arg Leu Ser Ala Leu Phe
 260 265 270
 Tyr Gly Gly Met Gln Gln Leu Asn Pro Val Leu Ser Arg Ala Pro Ala
 275 280 285
 Ile His Thr Arg Ser Thr Ala Ser Phe Lys Trp Ala Asp Thr Gln Asp
 290 295 300
 Thr Lys Leu Ile Glu Lys Gly Pro Lys Leu Pro Ile Gly Gly Gly Val
 305 310 315 320
 Gly Glu Cys Ile Thr Ile Pro Ser Asn Gly Ile Pro Asp Thr Leu Lys
 325 330 335
 Ser Thr Gly Leu Gly Lys Ser Tyr Asn Glu Leu Leu Ser
 340 345

<210> 1919

<211> 122

<212> PRT

<213> Eucalyptus grandis

<400> 1919

Lys Lys Tyr Ile Tyr Leu Gly Leu Phe Asp Ser Glu Val Glu Ala Ala
 1 5 10 15
 Arg Ala Tyr Asp Lys Ala Ala Ile Lys Cys Asn Gly Arg Glu Ala Val
 20 25 30
 Thr Asn Phe Glu Pro Ser Thr Tyr Asp Gly Glu Met Ile Ala Lys Ala
 35 40 45
 Ser Asn Glu Asn Ser Ile Tyr Gly Asp His Gly Leu Asp Leu Asn Leu
 50 55 60
 Gly Ile Ser Ala Ser Ser Arg Gly Met Val Glu Thr Leu Glu Pro Ser
 65 70 75 80
 Asp Asp Met Arg Gln Gly Ser Ser Leu Arg Val Gly Asn Ser Ala Ala
 85 90 95
 Ser Trp Gly Asp Pro Ser Val Glu Gly Leu Ser Met Thr Ser Gly Gln
 100 105 110
 Pro Leu Leu Asp Gly Cys Leu Ser Tyr Arg
 115 120

<210> 1920

<211> 155

<212> PRT

<213> Pinus radiata

<400> 1920

Leu Ile His Gly Gly Gly Gly Asp Asp Tyr Val Gly Leu Cys Glu Gly
 1 5 10 15
 Gly Phe Asp Thr Ala His Ala Ala Ala Arg Ala Tyr Asp Arg Ala Ala
 20 25 30
 Ile Lys Phe Arg Gly Val Glu Ala Asp Ile Asn Phe Thr Leu Thr Asp
 35 40 45
 Tyr Gln Glu Asp Leu Asp Gln Thr Ser Lys Leu Ser Lys Glu Glu Phe
 50 55 60
 Val His Ile Leu Arg Arg Gln Ser Thr Gly Phe Ser Arg Gly Ser Ser
 65 70 75 80
 Lys Tyr Arg Gly Val Thr Leu His Lys Cys Gly Arg Trp Glu Ala Arg
 85 90 95
 Met Gly Gln Phe Leu Gly Lys Lys Tyr Ile Tyr Leu Gly Leu Phe Asp

```

          100          105          110
Ser Glu Glu Glu Ala Ala Arg Ala Tyr Asp Lys Ala Ala Ile Arg Cys
          115          120          125
Asn Gly Lys Glu Ala Val Thr Asn Phe Asp Pro Ser Leu Tyr Glu Lys
          130          135          140
Glu Ile Leu Glu Glu Arg Arg Glu Ser Gln Thr
145          150          155

```

<210> 1921
 <211> 79
 <212> PRT
 <213> Pinus radiata

```

          <400> 1921
Leu Ile Gly Met Pro Asp Thr Asn Tyr Gly Ser Glu Gln Thr Asn Ala
 1          5          10          15
Cys Lys Lys Gln Lys Arg Ile Arg Ser Lys Asp Ser Gly Glu Asp Gly
          20          25          30
Glu Asp Arg Gln Arg Glu His Pro Phe Ile Val Thr Glu Pro Gly Glu
          35          40          45
Leu Ala Arg Gly Lys Lys Asn Gly Leu Asp Tyr Leu Phe Asp Leu Tyr
          50          55          60
Glu Gln Cys Gly Lys Phe Leu Leu Asp Val Gln His Ile Ala Lys
65          70          75

```

<210> 1922
 <211> 164
 <212> PRT
 <213> Pinus radiata

```

          <400> 1922
His Gly Asn Arg Phe Cys Arg Thr Gly Ile Ser Ser Cys Ala Gly Ser
 1          5          10          15
Gln Ile Pro His Cys Gln Ala Glu Gly Cys Lys Ala Asn Leu Ser Ser
          20          25          30
Ala Lys His Tyr His Arg Arg His Lys Val Cys Glu Leu His Ser Lys
          35          40          45
Ala Ser Thr Val Ile Val Gly Gly Phe Ile Gln Arg Phe Cys Gln Gln
          50          55          60
Cys Ser Arg Phe His Pro Arg Ser Glu Phe Asp Glu Gly Lys Arg Ser
65          70          75          80
Cys Arg Lys Arg Leu Ala Asp His Asn Arg Arg Arg Arg Lys Pro Gln
          85          90          95
Pro Ser Thr Cys Val Thr Ser Gln Ser Gln Ala Gly Thr Thr Gly Leu
          100          105          110
Glu Asn Asp Asn Gln Thr Thr Lys Gly Ser Ser Gly His Ile Thr Thr
          115          120          125
Ala Val Gln Asn Thr Pro Asn Ile Ser Arg Ser Thr Ser Ser Thr Ser
          130          135          140
Pro Ser Leu Ile Thr Ser Val Pro Met Met Met Phe Pro Asn Asn Tyr
145          150          155          160
Lys Gly His Ser

```

<210> 1923
 <211> 125
 <212> PRT
 <213> Eucalyptus grandis

```

          <400> 1923
Asn Thr Thr Phe Ile Thr Pro Asn Ser Lys Arg Ile Ile Ser His Asn

```

1	5	10	15
Pro Ser Ser Val Asp Arg Pro Ala Glu Ser Ala Ala Leu Ala Lys Arg			
20	25	30	
Met Arg Arg Ala His Ile Gln Asn Ile Ala Gly Asp Cys Asn Leu Lys			
35	40	45	
Asp Arg Leu His Ile Gln Ser Gly Ile Thr Tyr Ser Gln Gln Arg			
50	55	60	
Ala Pro Phe Ser Thr Leu Ala Gln Asn Phe Arg Thr Ser Asn Ser Pro			
65	70	75	80
Pro Gln Gln Ser Glu Ser Asn Gln Lys Glu Ala Thr Asp Asp Ala His			
85	90	95	
Gly Thr Asn Val Gln Gly Thr Phe Leu Lys Lys Asp Asp Pro Lys Val			
100	105	110	
Thr Ala Leu Ile Gln Gln Ala Glu Leu Leu Ser Ser Leu			
115	120	125	

<210> 1924
 <211> 50
 <212> PRT
 <213> Eucalyptus grandis

<400> 1924

Ala Ala His Gly Thr Asn Val Gln Gly Thr Phe Leu Lys Lys Asp Asp			
1	5	10	15
Pro Lys Val Thr Ala Leu Ile Gln Gln Ala Glu Leu Leu Ser Ser Leu			
20	25	30	
Ala Val Lys Val Asn Ala Asp Asn Met Asp Gln Ser Leu Glu Asn Ala			
35	40	45	
Trp Lys			
50			

<210> 1925
 <211> 257
 <212> PRT
 <213> Pinus radiata

<400> 1925

Ala Val Ser Tyr Leu Arg Ser Gly Ile Glu Glu Arg Glu Ser Glu Arg			
1	5	10	15
Leu Thr Asn Lys Met Asn Met Lys Ile Arg Thr Ser Asp Thr Ser Thr			
20	25	30	
Pro Asp Asp Gln Gln Gln His Ser Gly Ala Val Lys Val Ala Ile Pro			
35	40	45	
Ala Val Ser Gly Asp Ser Gly Thr Ile Gly Leu Lys Leu Gly Lys Arg			
50	55	60	
Thr Tyr Phe Glu Ala Val Lys Ala Ile Pro Thr Ala Ile Pro Ser Pro			
65	70	75	80
Ser Cys Val Pro Ala Ala Lys Lys Gln Gln Ser Ala Leu Gln Gly Thr			
85	90	95	
His Met Val Pro Arg Cys Gln Val Glu Gly Cys Glu Met Glu Leu Thr			
100	105	110	
Ala Ala Lys Asp Tyr His Arg Arg His Lys Val Cys Glu Leu His Ser			
115	120	125	
Lys Phe Pro Lys Val Ile Val Asn Gly Ile Glu Gln Arg Phe Cys Gln			
130	135	140	
Gln Cys Ser Arg Phe His Thr Leu Ser Glu Phe Asp Glu Gly Lys Arg			
145	150	155	160
Ser Cys Arg Arg Arg Leu Ala Gly His Asn Gln Arg Arg Arg Lys Pro			
165	170	175	
Gln Leu Asn Ser Thr Ala Met Lys Ala Ala Arg Phe Ala Ser Thr Phe			
180	185	190	

Tyr Asp Asp Gly Arg Leu Ser Ser Ile Leu Met Ala Arg Ser Pro Phe
 195 200 205
 Met His Pro Arg Ile Ala Ser Asn Leu Glu Glu Asn Ser Leu Asp Phe
 210 215 220
 Lys Leu Gly Gly Tyr Gly Lys Gly Ala Trp Pro Arg Ile Lys Ala Glu
 225 230 235 240
 Asp Val Ser Ser Tyr Asp Gly Gln Leu Ser Thr Lys Tyr Pro Leu Pro
 245 250 255
 Ser

<210> 1926
 <211> 230
 <212> PRT
 <213> Eucalyptus grandis

<400> 1926
 Met Asp Val Gly Ser Gly Ser Trp Thr Thr Glu Ser Gly Ser Ser Ser
 1 5 10 15
 Pro Pro Pro Leu Glu Ser Leu Asn Gly Leu Lys Phe Gly Gln Lys Ile
 20 25 30
 Tyr Phe Gln Asn Asn Asn Ser Ser Asn Asn Ala Ala Ala Pro Lys Asn
 35 40 45
 Gly Ser Gly Ser Gly Ser Gly Ser Ser Ser Ala Ala Ala Pro Ala Pro
 50 55 60
 Gly Ser Gly Thr Pro Pro Lys Lys Val Arg Ala Ser Ala Gly Gly Gly
 65 70 75 80
 Gly Cys Gly Ala Ile Gln Gly Gly Gln Pro Pro Arg Cys Gln Val Glu
 85 90 95
 Gly Cys Arg Val Asp Leu Ser Asp Ala Lys Ala Tyr Tyr Ser Arg His
 100 105 110
 Lys Val Cys Gly Met His Ser Lys Ser Ala Thr Val Ile Val Ala Gly
 115 120 125
 Ile Glu Gln Arg Phe Cys Gln Gln Cys Ser Arg Phe His Gln Leu Thr
 130 135 140
 Glu Phe Asp Gln Gly Lys Arg Ser Cys Arg Arg Arg Leu Ala Gly His
 145 150 155 160
 Asn Glu Arg Arg Arg Lys Pro Pro Pro Gly Ser Leu Leu Ser Ser Arg
 165 170 175
 Tyr Gly Arg Leu Gln Ser Ser Ile Phe Glu Asn Thr Thr Arg Val Gly
 180 185 190
 Ser Phe Leu Met Asp Phe Thr Ala Tyr Pro Lys His Ala Trp Ser Ala
 195 200 205
 Pro Arg Phe Ser Glu Arg Thr Thr Pro Gly Asp Leu Val Pro Gly Pro
 210 215 220
 Gly Lys Val Tyr Pro His
 225 230

<210> 1927
 <211> 35
 <212> PRT
 <213> Eucalyptus grandis

<400> 1927
 Gly Lys Arg Ser Val Glu Trp Asp Ser Asn Asp Trp Lys Trp Asp Gly
 1 5 10 15
 Asp Leu Phe Val Ala Arg Pro Leu Asn Pro Val Pro Ser Asp Phe Pro
 20 25 30
 Gly Arg Gln
 35

<210> 1928
 <211> 112
 <212> PRT
 <213> Pinus radiata

<400> 1928
 Glu Glu Thr Cys His Gly Asn Thr Phe Cys Arg Thr Glu Ile Ser Ser
 1 5 10 15
 Phe Thr Gly Ser Gln Ile Pro Gln Cys Gln Ser Glu Gly Cys Lys Ala
 20 25 30
 Asn Leu Ser Ser Ala Lys His Tyr His Arg Arg His Lys Val Cys Glu
 35 40 45
 Phe His Ser Lys Ala Pro Thr Val Val Val Gly Gly Gln Ile Gln Arg
 50 55 60
 Phe Cys Gln Gln Cys Ser Arg Phe His Gln Thr Ser Glu Phe Asp Gly
 65 70 75 80
 Gly Lys Arg Ser Cys Arg Lys Arg Leu Ala Asp His Asn Arg Arg Arg
 85 90 95
 Arg Lys Pro Lys Pro Ser Gln Cys Thr Thr Ser Gln Cys Gln Ala Gly
 100 105 110

<210> 1929
 <211> 117
 <212> PRT
 <213> Pinus radiata

<400> 1929
 Met Asp Glu Val Gln Val Lys Val Asp Ile Gln Ser Thr Asn Val Ser
 1 5 10 15
 Ala Asp Glu Pro Arg Pro Ala Lys Arg Gln Gly Phe Glu Leu Ala Lys
 20 25 30
 Ser Pro Glu Asn Val Ala Ser Lys Ser Thr Ala Leu Ser Ser Pro Lys
 35 40 45
 Lys Pro Lys Ala Ala Ser Ser Ser Ser Ser Ser Pro Arg Ala Gln
 50 55 60
 Pro Pro Ala Cys Gln Val Glu Lys Cys Ala Ala Asp Leu Ala Asp Ala
 65 70 75 80
 Lys Glu Tyr Tyr Arg Arg His Arg Val Cys Glu Gln His Ser Lys Ala
 85 90 95
 Arg Ile Val Leu Val Leu Gly Leu Gln Gln Arg Phe Cys Gln Gln Cys
 100 105 110
 Ser Arg Phe His Val
 115

<210> 1930
 <211> 143
 <212> PRT
 <213> Pinus radiata

<400> 1930
 Met Ser Ser Thr Ser Ser Tyr Ser Ser Pro Ser Pro Asp Thr Pro Ser
 1 5 10 15
 Gln Ser Ala Ala Val Arg Pro Thr Ser Thr Arg Asp Asp Ser Ser Val
 20 25 30
 Met Glu Pro Pro Arg Lys Arg Ala Arg Ala Asp Leu Asn Ala Glu Gln
 35 40 45
 Arg Arg Glu Ala Arg Ala His Arg Asn Arg Ile Ala Ala Gln Asn Ser
 50 55 60
 Arg Asp Lys Arg Lys Ala Gln Phe Thr Tyr Met Glu Gln Arg Val Ala
 65 70 75 80
 Gln Leu Glu Glu Glu Asn Gln Arg Leu Arg Ala Gly Met Gly Leu Ser

				85						90					95				
Gln	Phe	Thr	Pro	Ala	Asp	Asn	Asp	Lys	Phe	Val	Ser	Leu	Glu	Arg	Glu				
			100					105					110						
Ser	Val	Gln	Ala	Arg	Glu	Asn	Arg	Glu	Leu	Lys	Glu	Arg	Ile	Lys	Ser				
		115					120					125							
Leu	Glu	Ser	Gly	Trp	Ser	Ala	Val	Ile	Lys	Ala	Leu	Gln	Ala	Ser					
	130						135					140							

<210> 1931
 <211> 199
 <212> DNA
 <213> Pinus radiata

<400> 1931

aacaactgaa	caataaaaaat	cacaagcact	gaatctaacc	atctctccac	aaagcagaat	60
catttttttag	cagtgcagaa	ttaaatacaa	acacaattgt	tcggctgtaa	agcaaagatg	120
aagcatcacg	tagtgcacaa	ttgctgtagc	aagaaagctg	ttaaagagagg	cttctggctg	180
cccgaggaag	atttgaagc					199

<210> 1932
 <211> 380
 <212> DNA
 <213> Eucalyptus grandis

<400> 1932

gggatctcta	ggaacttcgt	gaaaacgcgg	acgccgacac	aggtggcgag	ccacgcccag	60
aagtacttcc	tccggcggac	caaccagaac	cggcgacgcc	ggcggtccag	cctcttcgac	120
ataaccaccg	actcgtactt	tggggtttca	agctctacaa	tggaggaggg	tcatcatcaa	180
gcgcaccaag	taccagctt	cctctttcc	ttgcctccgg	cggtttcacc	gggaaccggc	240
gagaaaactgc	tggaaagtct	gcgactaaga	aaagagggct	gccagtcgaa	acccaccccg	300
tcgaagccca	tccgcccgg	cccgatcctt	cccatccctc	cgtcctcgaa	aatggcggct	360
ctcgacctca	acaaggcgac					380

<210> 1933
 <211> 630
 <212> DNA
 <213> Eucalyptus grandis

<400> 1933

ggaccggcga	gtttctccgg	ggaagaccgg	cggagcggcg	gcggcggcgg	cggcggcggg	60
gggaaaagct	cccgcctttc	gtcgtttcgc	ggtccgtgga	ataggcgaca	agtcggattg	120
cggttgcgtg	cgcgcctcgc	ttcgatatata	agggcgggctt	gctgctgctg	ctactgggtct	180
gaggagtcaa	ccgagctcga	gcgttacgcg	cttcccgaag	gttccgcccgg	ctaggggtttt	240
tttatatttc	cctctgtttt	tcctccggtc	ggccacgggtc	gttgcttcgc	tttaaaagga	300
ttggcgcgat	tgagctgggc	ggagcttgag	ggttcggggc	gtggcggcgg	aagtggagtg	360
gagcgggggg	tggtggtgct	cgacatggta	atcgggttct	gacgatgccg	agctttgttc	420
cagcgacacc	ggcctccaat	tccattgggt	cggaggga	cgttggtccag	tctaatacaa	480
atacagattt	tgggtcggtt	gagcattcac	ttggattccg	catagaggat	gccatcaacc	540
ttagcagaac	agatcctgtc	tttaatcaga	taaaaccaa	cggtcgagct	cttgggaactg	600
acattcaagc	tcgtgctttt	aataagtctg				630

<210> 1934
 <211> 524
 <212> DNA
 <213> Eucalyptus grandis

<400> 1934

ctttactatt	ctaagtcctc	tactttctggt	ttggaatcac	taattttcttg	gtctcacttt	60
cgcttggcct	atcacccgag	agttctctgc	agaaacttca	cagccgtcct	ctgctctttc	120
accaaccatt	gtatgcctgg	ttttactagg	gctaggaaga	tgagcatgtc	cggagaagaa	180
gagggtagacc	tgcgaagggg	gccatggact	cgcgaggaag	acaatttgct	cattcactcg	240

atcacatgcc	acggcgaggg	acgctggaat	atgttggcga	agagcgaggg	attgaagaga	300
actggcaaaa	gctgcagatt	aaggtggctg	aattacctga	gacccgacat	caagcgcggg	360
aatctcacc	cgcaagaaca	gctcatgatc	cttgaacttc	accacaaatg	gggcaacagg	420
tggtcgaaaa	tcgcgcagta	tctcccagga	aggacagata	acgagatcaa	gaactactgg	480
aggacgcggg	tgcagaagca	agcgcgccag	ctcaacatcg	aatc		524

<210> 1935

<211> 440

<212> DNA

<213> Eucalyptus grandis

<400> 1935

gtgctgtgac	aaggtgggat	tgaagaaagg	gccgtggaca	cctgaagaag	accagaagct	60
cctcgcttac	atcgaagaga	acggccatgg	aagctggcgt	gctttgcctt	ccaaagctgg	120
tcttcagaga	tgccgggaaaa	gctgtaggct	aagatggact	aattatctta	gacctgacat	180
caagagaggg	aagttcagct	tacaagagga	acagaccata	attcaactcc	atgcccttct	240
tggcaatagg	tggtcggcca	tagcaactca	tttaccgaag	cgaacagaca	acgagatcaa	300
gaactactgg	aatacgcatc	tgaagaagag	attggcgaaa	atgggaattg	acccggtgac	360
ccataagcct	aaaaatgacg	ccctagtctc	tagtgacggt	caatccaaga	gcgcggctaa	420
gctcagtcac	ctggctcagt					440

<210> 1936

<211> 299

<212> DNA

<213> Eucalyptus grandis

<400> 1936

cggacccttc	cgaaaaatgc	agggctcagg	agatgcggaa	agagctgtcg	cctgcggtgg	60
acgaactacc	tgccggcccg	tatcaagaga	gggaggttca	cgttcgagga	agaggagacc	120
atcatccagt	tgcattgggt	tttggggaac	aagtggctcg	ctatcgcggc	tcaattgccc	180
gggaggaccg	acaacgagat	caagaactac	tggaaacccc	acatcaagaa	aaggctactt	240
aaaatgggga	tcgacccggg	gacacactcc	ccacgcctcg	atcttctaga	tctgtcctc	299

<210> 1937

<211> 377

<212> DNA

<213> Eucalyptus grandis

<400> 1937

ggccctctc	tctttctctc	tctctgtgtc	tgtctttctt	gtggatccac	caggctcgtc	60
tttaagaata	tacagcagcg	agcaggcaag	acaacgcccc	atctctcttc	tctctctctc	120
tctctctgtg	gctctgtctt	tcttttgttt	cttgccgttt	tgggggtgtg	gtgttgggtt	180
gtgtgaattg	gagcgaggat	ggggaggggg	agactgcagc	tgaagaggat	agagaacaag	240
atcaaccggc	aagtcacctt	ctccaagagg	agggcggggtc	tgctcaagaa	ggcccacgag	300
atctccgtac	tctgcgacgc	cgaggctcgc	ctcatcatct	tctccgcca	gggcaagctc	360
ttcgagtact	ccaccga					377

<210> 1938

<211> 278

<212> DNA

<213> Eucalyptus grandis

<400> 1938

tgtagcaag	catgtatgta	ctaactagta	gtttttgtaa	agcatgatgt	cgaaaccttg	60
agtagcaagg	tgaagatggc	tgaagagacg	gttaaaagag	taaccggact	gaacccaatg	120
ctgcatgtga	tgtccgacat	gtcttctgtg	ggtgtgccac	catttgatgg	tagtccttct	180
gatacatcag	cggatgctgc	agttcctgtg	cgagatgacc	caaagcacca	attctatcaa	240
accaattcta	gtaaccccg	atcatctgct	gacgatat			278

<210> 1939

<211> 342

<212> DNA

<213> Eucalyptus grandis

<400> 1939

acagggttgct	caattaagag	ttgagaattc	tacttttactg	aaacgtctct	cggacataag	60
ccagaagtag	aatgtagcag	ctggttgacaa	cagagttttg	gaagctgatg	tcgaaacctt	120
gagagcagag	gtgaagatgg	ctgaagagac	ggttaaaaga	gtaaccggac	tgaacccaat	180
gctgcatgtg	atgtccgaca	tgtcttctgt	gggtgtgcca	ccatttgatg	gtagtccttc	240
tgatacatca	gcggatgctg	cagttcctgt	gcgagatgac	ccaaagcacc	aattctatca	300
aaccaattct	atgtaacccc	gcacatctg	ctgacgatat	ga		342

<210> 1940

<211> 376

<212> DNA

<213> Eucalyptus grandis

<400> 1940

gctgtttttca	catcttttttg	aacacgcccc	taaagatccg	ccctcagagc	cgcctctgtc	60
cgggtggctgc	tgacattcca	cctagaaatt	cccgaccaag	ttcccccttt	ctaagccaga	120
ttgggaaagg	ttcatatttg	tccaacagta	gtagtggatt	taaattggga	ggcactcttg	180
ctgctacaag	cagaagctga	ggaaaggcct	ctggtcacct	gaagaagacg	agaagctcct	240
caggtacatc	acgcagtatg	gccatgggtg	ctggagctct	gttctctaagc	ttgcaggtct	300
gcagaggtgt	gggaagagct	gcagattgag	gtggattaac	tacctgagggc	ctgatttgaa	360
gaggggcaca	ttctct					376

<210> 1941

<211> 169

<212> DNA

<213> Eucalyptus grandis

<400> 1941

aggaattgca	gcacctggaa	cagcaattga	gtggggcctt	atcatctgtc	aaggagaaga	60
aggagcaatg	gcttctggag	cagctggagc	gttcaagatt	acaggagcag	agggctatgc	120
tggagaatga	aactctgcgc	agacaggtcg	acgagcttag	aggtttcct		169

<210> 1942

<211> 188

<212> DNA

<213> Eucalyptus grandis

<400> 1942

cgagatctcc	gtcctctgcg	acgccgacgt	cgccctcacc	gtcttctcca	ccaagggcaa	60
gctcttcgag	tacgccaccg	actggtgcat	ggagaggatc	ctcgagcggt	atgagagata	120
ttcatatgca	gagagccagg	ttctcacaaa	caatgccgaa	accaatggga	actggacttt	180
ggaacatg						188

<210> 1943

<211> 321

<212> DNA

<213> Eucalyptus grandis

<400> 1943

ctctttcctc	ctcaatcgga	agggttcttc	aacccaatgg	acggcaacct	ctcattgcaa	60
atcggaata	atccgacatg	tctggacgag	atgaatgctt	cggtttcgag	ccaaaatggt	120
gctggattca	ttccgggatg	gatgctttga	acttactaca	tcgacttgga	gtgtgaatcg	180
agctggtgaa	atttgtgcgt	gtgtcccttg	taaaattgcg	atccgcaaga	caataagtac	240
ataatatatt	ggagctgtga	tgacataaaa	agaggaaggc	caccctttcc	tctctcatga	300
tcagaacttt	tgataatgct	t				321

<210> 1944

<211> 905

<212> DNA
<213> Eucalyptus grandis

<400> 1944
ctagtggatc ccaagtctcc atcatcatga tctccagcac cggcaagctc cacgagtaca 60
tcagcccctc cacctcaacg aagaagatgt acgatcagta tcagcaggcg ctcgagggtg 120
atctctggag ctctcactat gagaagatgc aagagaacct gaggaagctg aaggagggtga 180
acaagaagct tcagctggag gtcaggagga ggttcgggga aggactgaat ggtatgagct 240
tatcggaatt gtgcggtctt gagcaagata tggacaacgc cgttagcctg atccgtgaac 300
ggaagtacaa gacgctcggc aatcaaactc acaccgccag gaagaagaaa aagaatgctg 360
aggaaataaa caaaagtctc ctgcaagact ggaccaatct gatcaagcat ctgagggagg 420
acgacccgca cttcggaatg gtcgacaacg gcagggatta cgaggctgtg atcgggtata 480
cagacgccgc cgccgccgct cgcttgtaca ccctgcgcct gcaaccggac cagcccaatc 540
ttactagcgg aggaggatcg gagatcacga cctacccttt gctcgagtga gacgaaggcg 600
tcggaaaccc ttccgacgct ctcatattgt ctattcattc tgtctaaggg ccgattccat 660
ctggaatcct gacttcattg gtatgtcgaa gtttaggact ttgttatgtc atcctattca 720
gcagctaagt ttgttcttat cagaagctgt tcctattatg gaccgagggc gatttcctct 780
agggcatcat gtgttttaag acaagtctat atataagact actttaaaac aatcgaatga 840
gttggtgcaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaact 900
tcaag 905

<210> 1945
<211> 337
<212> DNA
<213> Eucalyptus grandis

<400> 1945
gcggcaagga gcaactaaat gtaacactct gattactagg gacctctcat tgtcttttga 60
tggcatttaa atcaccagga ggaatcacgt ggctgaaaca tttacttgtg aagaactttt 120
acttagggga gcatctaaaa tgcaggaatg ggctcatcaa gaaggcctac gagctctccg 180
tcctctgcga catcgacatc gccctcatca tgttctcccc ctccgaccgc gtgagccact 240
tttcgggaaa aagaaggatc gaggatgtct tgacccggtt cattaacctc accgaccaag 300
aacggacact cctagatgtc caggatcggc gcacacg 337

<210> 1946
<211> 301
<212> DNA
<213> Eucalyptus grandis

<400> 1946
caaaccttcc cagggtttcc atttccattt ccttcataga atgctccgtt cttttcttat 60
cccttttttg gtactctctg ttctcatggt cctttcataa agttttctca tctcttaacc 120
aagactggta agagagagag agatagagag tttattagtg ggtgagggtg ttaaaaaatg 180
ggaagaggga ggggttcagct gaagaggata gagaacaaaa ttaacaggca agtgaccttt 240
tccaagagaa ggaatgggct cctcaagaag gcttatgagc tctcgctcct ctgtgatgct 300
g 301

<210> 1947
<211> 354
<212> DNA
<213> Eucalyptus grandis

<400> 1947
gccaagtagc accccgtttg cccacatta tctgtgatat gtaaactgtg tgggcctctg 60
ttagctacaa tatgattggc atcatttaag cttttgcgta atcatcagtg ttctcaattt 120
gcaaaatacc attaacggat cttgcagcat ggaaagcatt ttagagaggt acgagagata 180
cacttatgcg gagcgacagc aagtggccac tgattcccct caagtgcagg gaagttggtc 240
gcttgaatat cccaagctcg tggctaggat cgaagtcttg cagaggaaca taagaaactt 300
gagcggagaa gagcttgatc ccttgagtct gagagagctg cagtatttgg agca 354

<210> 1948

<211> 456
 <212> DNA
 <213> Eucalyptus grandis

<400> 1948
 gtttcctctt caggagaaag caaggagctg tagaggaatt gaaaatggtg caagaagtcc 60
 gaaagggtcc atggacagaa caagaagatt tccaactggt gtgctttggt ggactttttg 120
 gagatcgccg atgggatttt atagcgaagg tatcaggttt gaagggtggcg ggagaaaata 180
 ataggtatgt tcgtttttaa gcctgggggt tttttggaag gagctacttc taaccgcccc 240
 gctttattcc aggattgaat agaacaggaa aaagctgcag actacgctgg gttaactacc 300
 tgcacctcgg cctaaaacga gggaagatga cacctcaaga agagagactg gtgctcgaac 360
 ttcatcccaa atggggaaat agatggtcaa gaattgctcg caagctacca gggcgaacgg 420
 acaatgagat aaagaactat tggaggactc atatga 456

<210> 1949
 <211> 382
 <212> DNA
 <213> Eucalyptus grandis

<400> 1949
 atttttcaac tccccccccc caccgccgaat caaatcccat tccctctctc cctccctccc 60
 tttttttccc ccaatctttt gttgcgtttt caagcaccca cgccccccaa tctccaacgc 120
 catcaatcaa gctcaagcac catcacctca agaagaaaga aggaaagaaa gagagaagga 180
 ccggagaccc gacagagggg cgcgcgcgca cgagacatgg gacgatcccc ttgctgcgag 240
 aaggcgacaca ccaacaaggg cgcggtggacc aagggaagagg accagcgctt catcgactac 300
 atccgcctcc acggcgaagg ttgctggcgc tccctcccca aatctgccgg gcttctcagg 360
 tgcggcaaga gctgcaggct ca 382

<210> 1950
 <211> 371
 <212> DNA
 <213> Eucalyptus grandis

<400> 1950
 gttgagcagg tacagtttct tgaaaagagt tttgaagtag agaacaagct cgagccagat 60
 cgcaaaatcc agttggcaaa agacctcgga ttgcagccac gacaggtagc gatatggttt 120
 cagaatcgtc gtgcacggtg gaagacgaag cagctagaga aggattatga aactttgcaa 180
 gcttctttta acaccctgaa gtcagactac gacactctca tcaaggagcg gaatgatctg 240
 aaagccgagg ttcttaacct cacggacaag ctgcttcaca agggaaatga gaaggagagt 300
 tccgagtcgt ccagcaaatc atctcaaggg ctattccaga accccattgc tgattctggt 360
 tctgaggacg a 371

<210> 1951
 <211> 356
 <212> DNA
 <213> Eucalyptus grandis

<400> 1951
 aaaaagcata agctccctga cccataatcc ctagtatcga tggccagggt tcccagggtt 60
 gacaagagca acagcaagaa gacagtgaag aagggcgctt ggagtgcgga agaagaccag 120
 aaactgggtg cttatatcaa gagatatggc atttggaact ggactcacat ggccgaaccc 180
 gccggttttag cgagaacagg aaagagttgc cggcttcgat ggatgaacta tctgaggccc 240
 aacatcaagc atggaaacat caccgaagaa gaggaagaaa tcattattaa cttgcaccga 300
 gttcttggtg accgttgggc cagcatagcg agcagacttt caggaaggac ggacaa 356

<210> 1952
 <211> 475
 <212> DNA
 <213> Eucalyptus grandis

<400> 1952

ctccccctctc	ctggetctctg	ctctctctctc	ctctctcagt	tctttctcgg	acgggtgtct	60
gtgctgtggct	tttgatcggt	catcacctga	ggccgctct	gcaagcaagt	gaagaaggag	120
gacaagggaat	atggcgagag	agaagatcaa	gatcaagaag	atagacaatg	tgacggcgag	180
gcaggtgacg	ttttctaaga	ggagacgagg	gcttttcaag	aaagccggag	agctgtcggt	240
cctgtgcat	gccgaggtcg	ctgtcgtcat	tttctcggct	accggcaagc	tctttgagta	300
ctccagctcc	agcatgaagg	acactcttga	gaggtacacc	ctccaccaca	ataatcttga	360
gaatatggac	caaccttctc	tcgagctgca	gctggagcat	agcaataaca	tgaggttaag	420
caagggaagtg	gcagaaaaga	gccatcgact	caggcagttg	aggggtgagg	atctt	475

<210> 1953

<211> 541

<212> DNA

<213> Eucalyptus grandis

<400> 1953

atcgcccccg	ttctctcect	ctctctcect	ctcccccta	acgtttctgg	ccctcttctt	60
tgtctggaca	aaaagatggg	aagaaagtgc	tctcgctgtg	ggaacatagg	ccataactca	120
aggacttgca	caactttcat	ggggcgagca	agtgttgtg	ggctcaagct	cttcggtgtt	180
caacttgacc	tatcttcttc	ttctctcect	tcatcatcag	catctagtgg	ttctgtctcat	240
ccttattcac	ttgtcataaa	gaagagcctc	agcatggatc	gtctgtcttc	ttcctcggcc	300
tcctcctcgt	ctccatcttc	atccctctcc	tcgccaaagag	ttcttgctga	tgaacactgc	360
aataagacct	ccctcggata	tctctctgat	ggcctcgccg	ctagatccca	ggagaaaagg	420
aaaggagtgc	cgtggacgga	agaagagcat	cggacattct	taatggggct	agagaagatg	480
gggaaaggcg	attggagagg	catctccagg	aactatgtga	ccacgagaac	cccaacccaa	540
g						541

<210> 1954

<211> 437

<212> DNA

<213> Eucalyptus grandis

<400> 1954

cgcggttggc	gtcagataga	agagcatgta	ggaacaaaaa	ctgcagttca	gatacgaagt	60
catgccccaa	agttcttctc	taaggttgct	cgcggggtaa	gtggcagcag	cgagggtgtg	120
attaaacca	ttgaaatacc	tcctccacgg	ccaaagcgga	agccaatgca	tccatatcca	180
cgcaaatctg	tcgattcaaa	ggaggtgaaa	ctgtcctatc	aacaagagag	gtctccatct	240
ccaatctctt	cggtagcaga	tgaaaacact	ggatctccta	cttcagtttt	gtctgtctcat	300
ggttcagaca	tgctgggata	agcatctttg	catcaacaaa	acagatgctc	ttcaccgact	360
tcatgtacca	ctgatgtacc	ctctattggt	ctagctgtaa	ttgagaagca	acctgaaata	420
ttcaaagaag	aagataa					437

<210> 1955

<211> 470

<212> DNA

<213> Eucalyptus grandis

<400> 1955

attcggtcac	gagttcactt	cgtcgcctgc	ctcgctgctc	tcctgtctct	cctcgcgaaat	60
ctccatcggc	gagaactctg	ataaagcatc	cctcggctat	ctgtcggatg	gcctgtctggg	120
tagatcccaa	gagaagaaga	aaggagttcc	atggacagag	gaggaacaca	gaaccttctt	180
ggtggggctt	gagaagcttg	ggaagggtga	ttggagaggc	atctctagga	gctatgtgac	240
cacaagaaca	ccggcccagg	ttgcaagtca	tgctcagaaa	tatttcctcc	ggcaagtgtg	300
cttcaacaag	aaaaagcggc	gctcgagcct	ctttgacatg	gttgatgtca	aaaccgcggc	360
gggtgatcgt	ttaggcagtt	tgacggccaa	gccgagtgag	tcagttccta	attgcaaaaat	420
gggaaccttg	atgtctcatt	tgcaagttca	tgatgccaga	accactcagc		470

<210> 1956

<211> 384

<212> DNA

<213> Eucalyptus grandis

<400> 1956
 ctgaaatttc gtcttcaagc catggaacaa caggcgcaac tacgcatgc cctgaatgaa 60
 gcattgactg ctgaggtgca acgattgaag cttgcgacag cagagctcaa ctcggaatct 120
 catccttcaa agtgcattggt ttcacagctt cctgtgagct cccaaatggt ccagctccat 180
 cagatgcaac agcagcagca gtctcagcaa caaactcaat cacagcagca aaatggtaac 240
 acaaccacaa agtcagagtc gaatcaatag gacgtgggtg gtccaacaac tccggcgctt 300
 ggacaaacct cacttgcttc gggtcttcga caccctgcag tagttctcta gtgcatccat 360
 tcattcatta gtttttgc atgc 384

<210> 1957
 <211> 388
 <212> DNA
 <213> Eucalyptus grandis

<400> 1957
 gtttcctctt caggagaaag caaggagctg tagaggaatt gaaaatgggt caagaagtcc 60
 gaaaggggtcc atggacagaa caagaagatt tccaactgggt gtgctttgtt ggactttttg 120
 gagatcgccg atgggatttt atagcgaagg tatcaggttt gaagggtggcg ggagaaaata 180
 ataggattga atagaacagg aaaaagctgc agactacgct gggttaacta cctgcatcct 240
 ggcctaaaac gagggaagat gacacctcaa gaagagagac tgggtgctcga acttcattcc 300
 aaatggggaa atagatgggt gagaattgct cgcaagctac caggggcgaaac ggacaatgag 360
 ataaagaact attggaggac tcatatga 388

<210> 1958
 <211> 455
 <212> DNA
 <213> Eucalyptus grandis

<400> 1958
 tgacgatgtt tgtggaggag gaaagagacc ggaaaggcct ttcttttgca catatgacgg 60
 ggaggaaaaat ggagacgatg attatgatga gtatttacac caacctgaga agaaaaggcg 120
 attgtctatc gagcaagttc tgtacttgga gaagagcttt gagactgata acaagcttga 180
 accagataaa aaagttcagc ttgccaaaga actcgggttg caacctcgtc aagttgctat 240
 ttggttccaa aatcgaaggg caagatggaa aactaagcaa atggagaagg atttcgataa 300
 attgcaagct agttttaact gtttgaagtc tgattatgaa agtcttctca atgagaagga 360
 gaagctcaaa gctgagggtta ttcatttgac acaccagcta gagcaaaagga gcaacggaaat 420
 tctgaaccat tcgacatatc tgaacaattg cacac 455

<210> 1959
 <211> 965
 <212> DNA
 <213> Eucalyptus grandis

<400> 1959
 aagagaaaaag atacaatccg ccgtggaccc aagaagggtca aagcccgtct tctgcacgat 60
 gatgggtagt agtagtagta ctacttatct tccgtgaggt ctctcgaatt agggttttct 120
 tgattttcgc caacccccca atatttatct tttctttctt tctttttttt cgtctctctc 180
 gcagttcacc tagaaaagct acgagggctt cgcaccagtt ccgtacgggg ctgcttcagt 240
 gcgtagcgtg tactatctcg tctcaggtgg tgtttcgtt ttatggggat gtccttcggc 300
 gggggcggtt cgaagattct tgtagctccg tagcttgctc tgcgggattt ggttggggccg 360
 atcgtcaggt ttcttccagt taaagttgct atttttaagg ggagcgaggg cgtttgagct 420
 ggtaaagttc gaagcttttt gagttcggcc gccaggggtg tgtcctagag ataactggag 480
 gcgaaagggg gcgttccggt ccggtcagca tccgctgact caggagatgg ttggggggtg 540
 ttggtggcgg cggtgatgat gattcatggg tagtaggact agagttggcg gtgggtggaga 600
 tgatggcaga gttgtgaacg gcatgccgag ctctgctcct caattaccca ctctgaattc 660
 catgggatca gaaggaaact ccattcggtt ttctcgaatt acagactttg gaacacttga 720
 gcagtctctt ggataccgca tagaagatgc agttgacctc agcagaaatc ctgtcttcaa 780
 tcagatgaaa tcaagtggcc aggtctcttg ggctgatgtc caatttgggt ctttgaataa 840
 gtccctttca tctcagaca gaaatcttct tgtgaatatt gtgggggtct agactctatc 900
 tatgcataga gaatcacaat caaacttagt atcaataccc ggtgctcatc gtgagaactg 960
 ggggg 965

<210> 1960
 <211> 599
 <212> DNA
 <213> Eucalyptus grandis

<400> 1960
 gtccgggtccg gtctcctccc tcccttctct cctccttctt tctctctctc tctctctctc 60
 tctctcgccg tccaaccgta cggactctcg gttttgccc gaaacggaac ggagcggacc 120
 cggctccctcg ccgtcgccgg tgcgagagaa tgctcccc acgcgccgcc acccccgacg 180
 tcgccggcga cgagagctcc ggcgccgacg ccggcgccgg ggagatcatg ctgttcgggg 240
 tgcgggtggg cgtggactcg atgaggaagt gcgtgagcct gaacaacctg tctcagtacc 300
 agcaccgcga ggacgcgaat ccgcccaacg ccagcggcgg gagcggcggc aacaaggaag 360
 aggccgccaa aggtacgca tcggccgacg acgccgcgca caaccgcggc ggtggccgcg 420
 agcgcaagag aggagttcct tggacagagg aggagcacag gctgttcttg ttgggattac 480
 agaaggtggg gaaaggagat tggagagcga tatccaggaa ctttgtgaag acccgcacgc 540
 ccactcaggt cgcgagccat gccagaaat atttctgctg ccgaagcaac ctcaatcgc 599

<210> 1961
 <211> 377
 <212> DNA
 <213> Eucalyptus grandis

<400> 1961
 ggagaacgtg gcttctgggt cgactgagcg gccgagaatt agacatcagc atagccagtc 60
 tatggacggg tcgacgagta ttaagcccg gatgcttatg tcgggttcag aggatgcatc 120
 tgctgcagac gccaaagaagg ccatgtctgc tgcgaagctt gctgagcttg cactgattga 180
 tcccaagcgt gcaaagagga tctgggcaaa cagacaatcg gctgcaaggt caaaggaaag 240
 gaagatgcga tacatagctg agctagaacg gaaagtacaa actttacaaa ctgaagcaac 300
 aactttgtct gcacagctga ctctgctgca gagagacaca aatggtttga ctgctgagaa 360
 tagtgaattg aaactgc 377

<210> 1962
 <211> 317
 <212> DNA
 <213> Eucalyptus grandis

<400> 1962
 aagtaaaatc ccctctcggc tcccttttct tttatgtaca ttccaagaac agcgacagat 60
 aaggccccga gatctgcaag tcttcttcac actactcgct gatggctgat tctgaacatt 120
 cttcttctga tgacacttac gtggactcta gagaagagac aagtgaagaa tcaaagctag 180
 atttctctga agatgaggag acgcttgtaa ttagaatgta caacctgggt ggagaaaggt 240
 ggtctcta at tgctggtaga atcccaggga ggacagctga agaaatcgag aagtactgga 300
 attccagata ttcaaca 317

<210> 1963
 <211> 471
 <212> DNA
 <213> Eucalyptus grandis

<400> 1963
 ctctctctc ataatgcata attcacaggc gcggcacaag gcacgaaaag ataaaaaaaa 60
 aaacgatggc cggtagaggag ccctattctg ccgacacgaa ctcggaact ttcgctgatg 120
 aagaaacgct gattccgagt tcttccgagg ctcttgagtc cgcctgggtt cctacttctt 180
 cgaccgctca tcatggttca aaatcagtgg tcaattttga ggacgtttgt ggaggaggag 240
 acaccaatac tgcgccgagg ccatacctcc gacagattga tctgaaggaa gaagccgtcg 300
 aagaggacta cggcgacggg aactttcagc ctctggtaa gaagcggcgg ctatcggccg 360
 accaagtcca tttcctcgag aggcactttg aggtcgagaa caagctcgag cccgagagga 420
 agatccagct cgccaaggac ctcggcctgc agccgaggca ggtcgcgatc t 471

<210> 1964

<211> 372
 <212> DNA
 <213> Eucalyptus grandis

<400> 1964
 tgacactgaa gattcgaaga agaaagagag gcatattgtg acttggtctc aagaggagga 60
 tgatatactc cgggagcaaa tcggtataca tggaaactgag aactggtcga ttatcgcatc 120
 aaagtccaag gataaaacga cgagacaatg cagaaggaga tggtaacacat atttgaattc 180
 tgacttcaag aaaggggggt ggtcacccga ggaagatgtg cttttatgtg aggctcagaa 240
 gattttcggc aacagatgga cagaaatagc aaaggtgggt tcaggcagga ctgacaatgc 300
 cgtaaaaaat cgggttcacaa ccttgtgtaa gaaaagagca aggtacgaag ccttagcgaa 360
 agagaataca ct 372

<210> 1965
 <211> 424
 <212> DNA
 <213> Eucalyptus grandis

<400> 1965
 atgcaatttt gagcgtcgcg agtaagccgg agcgagggga gagcgatggg caggcagccg 60
 tgctgcgaca agcttggggt gaagaaaggg ccgtggacgg cggaggagga ccggaagctg 120
 gtcaacttca tactcaccca cggccaatgc tgctggcggg ccgtcccca gctcgtctgg 180
 ctccgcccgt gtggcaagag ctgccgcctc cgctggacca actacctccg ccccgatctc 240
 aagcgtggcc tcctcaatga agccgaggaa agcctgggta tcgatctcca tgccactctc 300
 ggcaataggt ggtccaaaat agcagctaga ctaccgggaa gaacggacaa cgagatcaaa 360
 aaccactgga acacccatat caagaagaag ctcattagga tgggcattga tccagtcact 420
 caca 424

<210> 1966
 <211> 427
 <212> DNA
 <213> Eucalyptus grandis

<400> 1966
 cccggctccc gctcgtccaa tcggcgcgtc gagaggaaga aaggtaacct atggacggag 60
 gaagagcatc gaagggtttt aattgggtctc cagaaattgg gtaaaggaga ctggcgaggg 120
 atagctcgtg actttgtgac tacaaggact cctactcaag tggcaagcca tgcccagaag 180
 tattatatcc ggcagagtaa tgctggccga agaaagaggc gctccagcct ttttgacatg 240
 gctccagata tgggtttgtc tctctatgat gttgcttctg cacattcatt gcactccggt 300
 caaatatccg gctcgtgcat gttttaagat gttttcttag ctcatgctga catatgcttt 360
 aaccatgcac tagtgatgat tacatgataa gggccattcc tcttagacct ttgggacaca 420
 tcaaatg 427

<210> 1967
 <211> 373
 <212> DNA
 <213> Eucalyptus grandis

<400> 1967
 cttgaaaactt ctccgtctt ctcttctctc tcttgaaagg aaggatgaga aaaccttggt 60
 gtgacaagca agacacaaac aaaggagcat ggtcgaagca agaagaccag aagctcatcg 120
 actacattcg caagcacggc gaaggatgtt ggcgaactct tcctaaggct gccggtctcc 180
 tccgttgccg gaagagttgt aggctaagat ggataaacta tttgcggcct gacctcaaaa 240
 gaggcaactt tgctgaggat gaagaggatc ttatcatcaa gcttcatgct ctcttaggca 300
 accgatggtc gctaattgct gggagattgc ccggacggac agacaatgaa gtgaagaact 360
 attggaactc aca 373

<210> 1968
 <211> 197
 <212> DNA
 <213> Eucalyptus grandis

<400> 1968

gggtcgccccga	ggaagacgag	aagctcttca	actacatcac	ccgattcggc	gtcggctgct	60
ggagctctgt	accgaagctc	gccggactcc	agagatgtgg	aaagagttgc	aggttgaggt	120
ggataaacta	cctgaggcct	gacctcaaga	gggggatgtt	ctctcaagaa	gaggaggatc	180
tcattgtcag	tctccac					197

<210> 1969

<211> 365

<212> DNA

<213> Pinus radiata

<400> 1969

gcaaaatctt	atttgggttc	ccttacagaa	actatacagt	ccctgaatgc	tgagcttgaa	60
agaactagat	cggagtgggt	tgaagcaaa	aagagagagg	aagagattat	ttcaaaagaa	120
gctgaaagag	tagagaagaa	taagagagaa	gtggaaaatc	tggaactcaa	tcttctgcaa	180
actactgcag	aagctgggag	agctaaactg	gaactagaga	ctgcttatga	agaggtgcag	240
agcgcaagac	ttgaaactgc	gcaattgagg	gctgctttgg	aagccacaga	gggaaaattt	300
gaagcaatgc	tgagtgcagc	taggttggag	gcagagcatg	tcaaaggagc	tattgagaag	360
tataa						365

<210> 1970

<211> 260

<212> DNA

<213> Pinus radiata

<400> 1970

gaaatattgg	tgactcaa	at	agagcaactt	caaagaaagg	aacggatgtt	tagcgaagag	60
aataattttt	tccgaaagcg	gattgtcgat	ccccattccg	ttttgacaac	tcttgcaagt		120
gcatctggaa	gcctccaaag	aagtgaagtc	gagactcaac	tggttatgag	accgccagtc		180
tcaaattgctg	attttctttt	taatagtctt	cattgataat	cactgtattc	atatctttgt		240
tattaatttta	ttatgaaatg						260

<210> 1971

<211> 332

<212> DNA

<213> Pinus radiata

<400> 1971

tctctctgggt	gtggggggca	ctcaaaatgg	ggaagacgaa	gatggagatt	aaacgcattc	60
aaaaccctag	ccgccgccag	gttactttct	cgaaacgcaa	gaacggattg	ctaaaaaagg	120
cattcctgagct	ttctgttctc	tgcgatgctg	aagtcgccct	gatcattttc	tcgaaactg	180
gcaagatctg	cgagtgttgc	agccacgacg	acatggcaac	aatactggaa	aaatatcgaa	240
tatacacgga	aacacatgga	aacatggagt	cctcgtcggg	ccaaagcgtg	aagattgggtg	300
aatcacaact	caaagcgttg	cgtgagaaga	tg			332

<210> 1972

<211> 413

<212> DNA

<213> Pinus radiata

<400> 1972

cttcgaggtg	ctaattggctg	cacaataacct	tcaattggat	tgacaagcat	agaacgcgtg	60
gaagtccaga	ctcaactggg	catgagacct	ccacatgccca	cagagatgga	cgacaacttt	120
atggatgttg	acaacgtgcc	actatctgga	tgatgttttt	ctgtttctgt	tacataatat	180
ggccactgat	gacaccatac	tttatttttg	tatttgcttt	aaaaatgact	ctttctttca	240
ctgacttttg	atggactgta	tgatagttga	tttttggtcc	tcatacttta	gcaaatgggt	300
atgggtacct	gttttggtcc	gaggccttgg	aggatctact	ctctatatgt	tactgtttta	360
ctttttacat	ttgtgctcac	tgactcatat	gatggacttg	cccacatatg	atg	413

<210> 1973

<211> 521
 <212> DNA
 <213> Pinus radiata

<400> 1973
 agaagatggg agcttggtga tctgtgaaag atctctctct gcggtcaag gtatgcctat 60
 ggtatcacag tctcaaagct ttgtgcatgg tgaactctta tctagtgggt atttgatccg 120
 accctgtgaa ggcagaggag cattagtcac catggttgat cacaggaact tagaggcttc 180
 aagtgtccct gaagcacttc gtcccttata tgagtcacat acattctttg cacagaagat 240
 gacagttgag gcttcttata atcttcaagg taaagttcaa cgggaaatga tttccttata 300
 aaaaaaactc caacagccat gtaatgtacg gtcatacagt caacggcttt gcagaggctt 360
 taatgaggga gtcaacacat tacctgatga tggctggatg tcattgtcca aagatgggct 420
 ggggatgtc actatgttg taaagcttt gtcaaattgc cgaaaccaa tgatcatcgtc 480
 aaatagccta tgttcaacag acatgggcat cttgagtga a 521

<210> 1974
 <211> 461
 <212> DNA
 <213> Pinus radiata

<400> 1974
 gaaaatgaaa gccttcgagc tcgtttaagg catatgaatg gcatgacat caattcggtg 60
 aagcttcccc aactcttcca tctgaacag cagcttgaaa cggccgcaac ccaagttcga 120
 agaagaaaagg atcaagtttt agacaacgaa aaaatcaagc gaaggaacaa gatgcgccgt 180
 aaggaagacg agaacatcat tcttcacgaa atgcttgacc agcaccatgg acaaaggag 240
 gaggataacg ctacagattaa tttcctatgt tgccaacat taaatagatc ggatactact 300
 ttccctgcat cactactccg cctgcaacca aatcagccaa atttgcagga tattggatat 360
 taattactga acggaccatc tgtgtgcatc ataatgagaa ggtcatggac ttctcagtaa 420
 cagtcaatta tgaaaattcg aagtttgtga ggaaaaaaaa a 461

<210> 1975
 <211> 499
 <212> DNA
 <213> Pinus radiata

<400> 1975
 tgagccccc ggtggagcac cgacctttca gcccacatga agacgccacc atcatacaag 60
 cccatgcgcg gcatggcaac aagtgggcta cgattgccc cctcctaccc gggcgacccg 120
 acaacgctat caagaaccac tggaaactga ctctgcgacg tcgctatcat ggcgagaaag 180
 accagagcaa cgggctagct gtgaacttgg agtcggcagc tgaggacaaa gaaacgatga 240
 ctccgatgac acctgtcaca gccacggcaa cggcaacggc aacggcaatg ccagtggctt 300
 tagtgttccc aacggctgca gacaacgtca ggaagcggag caacagtagc tgcagcgcta 360
 atgacaatcc aggagatgcc gaggtcgaat cctgtaggct taagaggctc aatttttctg 420
 aatccccatc tagttctgaa aatattaata ataataacaa taatgaagaa gctgttagtg 480
 gccattgcaa ttcggccgc 499

<210> 1976
 <211> 419
 <212> DNA
 <213> Pinus radiata

<400> 1976
 ctacagagctc gacaaaacct acatacatc gtctgtcatc cctcccagaa atacctagtg 60
 agggcgatcg aggtcgaaag gggcatttta cgccattgaa gcggtgtgca taggggtcaac 120
 tctgagaact gattgtgtct tccttcggag ggagaggggt agcgagggtc agaaagagag 180
 agaaagagaa agtagtccta agggactgtt taaaatgggg cgagggtccag tccagctgag 240
 aaggatagaa aacaaaataa atcgtcaagt aacgttttcg aagagacgga atgggctgat 300
 aaagaaggcg tcagagctgt caatcctgtg tgatgcggaa gtggccttaa ttgtcttctc 360
 caacaaaggc aaactctatg agttctccag ttccagtatg accaagattt tggaaagat 419

<210> 1977

<211> 459
 <212> DNA
 <213> Pinus radiata

<400> 1977
 gcaagctggc ctccagcggt gcggaagag ttgcaggctt cgggtggatca actacttgag 60
 accagatctg aagcgaggca cattctctcc gcaggaagaa aatctcattg ttgaactgca 120
 ttcagtcctc ggggaacagggt ggtctcaaat agcaacacac ctgcccggaa gaactgataa 180
 cgagatcaag aacctctgga actcgtgcat taaaaagaag cttaggcaac gaggcataga 240
 tctaacacg cacaggcctc tcagcgagggt gaatgccgag gcaggggatt ctaagaacga 300
 taacagcaat aaagaagtcg aaactcaggc agccatggac gaatctcatg tttctgcagg 360
 gaacgaattc aagcatctga atgcaattcc tagggctgat acggccaatc cttaaattctt 420
 tcatgttccc gttgaggaca acactttgat tgctagcga 459

<210> 1978
 <211> 331
 <212> DNA
 <213> Pinus radiata

<400> 1978
 ggagagtgc ccaccgagat ccacgcagtc gaagagaaa agaaatctgc aggaggagtt 60
 gaaaatgagg tgcacacgat ggcaaggctt cccattttcc tccaaaccaa aagttaaaaa 120
 ggtctctgg tcgcttgagg aagatgagaa actcatcaat tatatgatga agaacggcct 180
 tctcggctgc tcttgaggct atgtggccaa gcagattggt ctgcagagat gcggaaaagag 240
 ttgcagactg agatggacta actacttacg tcttggcctt aagcgggggtg caatttccgcc 300
 tgaggaggag caattgatca tacacttaca g 331

<210> 1979
 <211> 375
 <212> DNA
 <213> Pinus radiata

<400> 1979
 gttctatcaa acttcttacc caccataccc atttccatta gacggctgaa ttctcagatc 60
 caatttggtc cagccctcta gcgacagaag aagatgggaa gagcaccctg ttgtgacaag 120
 gcaaatgtca aaaaaggacc ttgggtacca gaagaagaca caaaactcaa ggcgtttatt 180
 gaacagcatg gcaactgggtg caattggatt gctcttccac agaaagctgg tctgaaaagg 240
 tgtggaaaga gctgcaggct tagatggttg aactatttga ggccagatat aaggcatggg 300
 ggtttctcag aagatgaaga taacatcatt tgtagcctct atgcaagcat tgggaagcatg 360
 gtgtctataa ttgca 375

<210> 1980
 <211> 749
 <212> DNA
 <213> Pinus radiata

<400> 1980
 gagcttcatc cgccattatt gggtttcaat tcgatcttga tttgccagag acgatgtgaa 60
 ttaccattct gtgggcaaaa gcgagagagg aggagaatgg tgaggggaaa gaccagatg 120
 aaaaggatcg agaacgacac gagcaggcag gttacgtttt ctaagcgag gaatgggtta 180
 ctgaagaaaag cttatgagct ctctgtgctc tgcatgccc aagtgggact tataattttc 240
 tcaccaagag ggaactata tgaattcgcc agtcccagca tggaggagat tttggaaaag 300
 tataaaaaaac gttcgaagga aaatggcatg gctcagacaa cgaaagagca agatactcag 360
 tattccaaac attccaaaca aaagctcgca aatatggaag aacagattag gattcttgaa 420
 tcaacccaaa gaaagatgtt gggggaaggg ttggaatcgt gttcaatggc agaattaaat 480
 aagttagaga gccaagctga acgaggattg agccatatac gggctcgaaa gacggaaata 540
 ttggttgacc aaatagaatg tcttaaaaagg aagggaacgtc tcttaagcga ggagaacgcc 600
 ttactcagta gaaagtgggt tgatcgtaa tccgtggacg gttccgggtc aacatcatct 660
 tcaattggat tgggaagcat cgagcagatc gaagttgaga cacaactggt tataagaccg 720
 ccaaatgcac aggatcactg ttctgtaaa 749

<210> 1981
 <211> 339
 <212> DNA
 <213> Pinus radiata

<400> 1981
 cttggctggg gaagacaacc cgctgcatta cggacattta gccagagatt gtgcaagggt 60
 ttcaatgagg cagttaatgg cttcacagat gatggatggg ctttgatggg taacgacgga 120
 atggaggatg taactattct cgtcaattca tctccaagca aactgttcgg tcaacagttt 180
 gcttcttccg atgggcttcc tgctcttggg gggggcatcc tatgtgcca ggcttctatg 240
 ctattacaga atgttctctc agcattgctt gttcgtttct tgcgagaaca tcgatcagaa 300
 tgggcagata gtaatatga tgcctattca gcagcctct 339

<210> 1982
 <211> 373
 <212> DNA
 <213> Pinus radiata

<400> 1982
 ggattccgac ccttccggct aaagctgctt catttctgtg tgtattgaag atggggagat 60
 ctccctgctg tgaaaaagct catacaaaaca aaggggctg gaccaaagaa gaggacgatc 120
 gcctcatcgc ccacattcga actcacggcg aaggttgctg gcgctcgctt cccaaggccg 180
 cagggctgat gcgctgcggg aagagctgca ggctccgatg gataaactac ctgcgtcctg 240
 atctgaagcg tggaaaacttc tcagaagaag aagacgaact catcatcaaa ctccactccc 300
 tactcggcaa caagtgggtct cttattgcag gcagattgcc cgggcggacg gacaacgaga 360
 taaagaacta ctg 373

<210> 1983
 <211> 404
 <212> DNA
 <213> Pinus radiata

<400> 1983
 aggcaataag tggttattatt gagaacttga ctgtggctga gattttcagg gatggaccgt 60
 tcaaaactctg cgactggaga agaagatgta ctgtcaagat gcagggaaag aaaacgtttc 120
 atgaagctgg caattgagaa caggtataaa ctagcaacag ctcatgtggc ttacatggat 180
 tctcttaggc gtatgggcac cggctctcgg ctttttgctg aaggcgaaac gatgtcggag 240
 tcttcttatt ccacatcacc catagggact tctgaacttg ctgttgctt gcctgagaaa 300
 tccgtatccc catctccatt tccatcctca tccccttcac tttctcaacc tcaaagtccc 360
 cgttcagaga gagcagaatc tcgatctcca ctgcacagct tctc 404

<210> 1984
 <211> 332
 <212> DNA
 <213> Pinus radiata

<400> 1984
 cggacggctt ggttcaaaac tctcgtgaaa gaaaaaaagg cgttccttgg acggaagaag 60
 aacataaaat gtttttatta gggcttcaca aattgggaaa aggcgactgg agaggtattt 120
 ccagaaactt tgtcacttcc agaactccta ctcaagttgc tagccacgca caaaaatatt 180
 ttcttaggca gagtaatttg aacaaaagga aacgaaggtc gagcctgttc gatatatcca 240
 ctgattcgat ggaagattgc tatcaaggaa tcccggagct gtcaccggtg atgcacgate 300
 tcagcctggg ccagaattca tctctgacct ct 332

<210> 1985
 <211> 526
 <212> DNA
 <213> Pinus radiata

<400> 1985
 ctctctctcc gtctccaaac ccaagctaag gaaaggcctc tggtcgcctg aggaggatga 60

taaactcatc	aactacatga	tgaaaaacgg	ccagggttgc	tgagcgatg	tcgccaagca	120
agctggtctg	cagagatgcg	gaaaaagctg	taggctgagg	tgatttaact	atttaaggcc	180
cgacctcaaa	cgcggtgcat	tttcacccca	ggaagaacaa	ttgatcatac	acttgcattc	240
cattctcggc	aacagggtgg	ctcagattgc	agcccgtttg	cccggacgta	cggacaacga	300
gatcaagaat	ttctggaact	cctgcataaa	gaagaagttg	aaacaccttt	cggcctccac	360
caacaacagt	aaatctatct	ctgcacctaa	tcgtaccagt	accatgaatt	catcgatcac	420
gcccttttct	gaatcgtctg	ccgagccatt	ggagggtcatg	gcaacaaggt	atcagccatc	480
gaatgctttt	aatcatgaag	tgcccactgc	agaaaatcaa	gtttttg		526

<210> 1986

<211> 366

<212> DNA

<213> Pinus radiata

<400> 1986

atcagactca	catcaaacga	aactggagcc	gtgaagggtt	agttgcggtg	ttaaattcta	60
ggacagcttt	cogtattaga	aagaggcgcc	ctttacggga	gtcggcacca	aaccagagt	120
gagagaaata	atgggtaggg	ctccctgctg	cgaaaagggt	gggtcaaga	agggccctg	180
gacgccggag	gaagatcaaa	agctcctcgc	ttacatacag	gagcacggcc	atggcagctg	240
gagggctctg	cctcagaaag	ctgggttgct	aagatgcggg	aaaagctgca	gattgcgttg	300
gactaactat	ctaagaccag	atatcaagcg	gggaaagttc	aaccacagg	aagaacagac	360
aattat						366

<210> 1987

<211> 476

<212> DNA

<213> Pinus radiata

<400> 1987

ccgaactccc	cgctgtgatc	aaatgggatt	aaaaaaggga	ccctggacac	ctgaagaaga	60
tcaaatactc	atctcctata	tcaacaagca	tggtcatgga	aattggcgtg	cgctgccccaa	120
gcaagcagga	cttatgcat	gtggaaagag	ttgtcgctg	cggtggacaa	actatctgag	180
acctgacata	aaacgtggga	acttcagtct	caaggaagag	cagactatta	ttcatctgca	240
tcaaatacctt	gggaaccgat	ggtcagctat	tgcttcacac	ctccccggaa	gaacagataa	300
tgagataaaa	aatgtatgga	acactcattt	gaaaaaacgc	ctcctgcaaa	ttggggtaga	360
cccagtaaac	cacgcgccta	gaggatacaa	tgatcttaac	tgttacaccg	ctgtgaatat	420
ccgggaccat	catggcgagc	aggccgatca	tcagctccaa	agccatgtct	gcgttt	476

<210> 1988

<211> 151

<212> DNA

<213> Pinus radiata

<400> 1988

ggacacctga	ggaagatcga	attcttatct	cctatataaa	aaggaatggc	catggaaagt	60
ggcttgcaact	gccgaaacaa	gcaggactta	gccgatgcgg	gaagagttgt	cgactgcggg	120
ggacaaacta	tctgagacc	aacataaaac	g			151

<210> 1989

<211> 461

<212> DNA

<213> Pinus radiata

<400> 1989

gtaacccatc	aggagtcttc	ttctgtccaa	ccccctaac	tctccacttc	acagatctca	60
tgagacttaa	cctgttctaa	cgttgcaggg	caataaccct	ctttgtctct	tggtctgtat	120
tttttgcttt	ttgaccacag	agcagggtca	acaagcttgt	acaaaggacg	cactgaaaaat	180
gaaggatttt	tactgcagct	tatgttaaag	tttattttat	ataaacgatg	ggaactgggg	240
aagaagcaac	gccaaactaag	cctgctgcca	aaccatcttc	ctcctcccag	gagacaccga	300
caacacctgt	ttatccagat	tgggcagctg	ctttccaggc	atattatggg	ccagggtgcta	360
ccccacctcc	tcctgccttt	tttgcttcaa	cagtgggatc	tgaccaact	ccacatccat	420

acatgtgggg tggacagccg ttgatgccac cttatgggac t 461

<210> 1990
 <211> 418
 <212> DNA
 <213> Pinus radiata

<400> 1990
 gtagattcct tgtctatcaa gaggggtgcac aagggtttgtt ttttaagaaca cagacaggca 60
 gacagacaga gacgtgatca tggggcgagg gaagattgaa ataaagaaaa tagatgatgt 120
 aacgagcaga caggtaactt tctcaaagcg caagatgggg atattcaaga aagcccacga 180
 gctgtctgtt ttatgcgatg cagaggtggc tgttctcatc ttttcaaaca ccggaaggct 240
 ctacgactat gctagttcaa ggtgtatgga acgaactatt gagagatatg aaaaatgtac 300
 caaagcaatt aattgcccaa catcagatcc cattgtcgag aataagagcc caattcagga 360
 aggcattgaa atattgaggc agaaacttcg tgcattacaa agattgcaaa gaaatctg 418

<210> 1991
 <211> 321
 <212> DNA
 <213> Pinus radiata

<400> 1991
 actaaagcag ctataaagag actgcagtct cagataatgg ttgcattcca ggcagttgat 60
 acaacttctg cagcaattct gaaattgaga gaagatgaac tctatcctca actcgtggag 120
 ctatctaaag ggctaattgca gatgtggagg gccatgtatg aatgccacca ggtccaaaat 180
 catattgtcc aacaggtgag gcatttgggc aatctggcaa gcgcagaggc cacaagtagt 240
 taccatcagc aggcaaccat tcaattggaa gctcaggtga ctgcttggta tgacagtttt 300
 tgtagaatga taacgagcca g 321

<210> 1992
 <211> 390
 <212> DNA
 <213> Pinus radiata

<400> 1992
 gagaaaaacct aagtcctctc gcagcaagca agccacgcat tccctctcta cgactcgggt 60
 ttggtgtaga aggcagagat ttactttgtt tctgcttgtt tgtegggtctt caccttcacc 120
 ttcagacaac atttgtctga accgcggaac tagctcttga aatattgaaa cccacctaaa 180
 tcgcagggga ttggtggatg ttagcagtggt tcacagagcg gtagagctag ggaaaatcca 240
 tatacaacta catacacaga taccattat cagccatggg cgctccgaag caaaaatgga 300
 catcagaaga agaaggtgct ctgcgagcgg gcgtggagaa gtatggcgcc ggcaagtggc 360
 agaccattct caaggaccca gagttcgct 390

<210> 1993
 <211> 476
 <212> DNA
 <213> Pinus radiata

<400> 1993
 gcagtgggtca tatggatggg ggatccggag aggaccaaga tgccgccgat caagatcacg 60
 atcacgatca cgatcatgat cacgagcagc agcagacgcg gaggaaacgt taccacagac 120
 aactgctcg tcaaattcag gagatggaag cgttggttaa ggagtgtcca catcctgatg 180
 acaaacaaag gcagcggtc agcattgaat tgggccttaa gccgcggcag gtgaaattct 240
 ggtttcaaaa tcggcgctact cagatgaagg ctcaacagga tcgctcagac aacgccattc 300
 tccgtgcaga gaatgaaaat ctgcggaacg agaacgtagc actccgagaa gcaattaaaa 360
 atggtgcttg tccaaactgc ggagggtcta catcgctggg agagatgcct ggattcagcg 420
 aacaccattt ccgtatagag aatacgcgct taaaggagga gcttgatcga gtgtct 476

<210> 1994
 <211> 429
 <212> DNA

<213> Pinus radiata

<400> 1994

gataaaactga	gtgagcaaaa	ttactcagaa	agaaggaaga	gcagaacaat	tcgcccggag	60
gaatggggttg	cacacaaggg	caacgacaag	gggaatggga	agggaaaagg	gtcccctcga	120
attcctcaag	gcgaagtcta	agaaaagggtc	tctgggtcacc	ggatgaagat	atagaactta	180
ccacctatat	catgagaaaag	ggcctcatgg	gctgctggaa	ctatatcgcc	aagcaggctg	240
gtctgcagag	atgtggaaaag	agttgcaggc	tgagatggat	taactacttg	cgacctgggtc	300
ttaaagcttg	tgcaatttca	ccccagaag	agcgactgat	aatacagtta	caatccagtc	360
tcggtaacag	gtgggtctcaa	atcgcgccac	atttaccggg	acgcacagac	aatgagggtca	420
agaattact						429

<210> 1995

<211> 321

<212> DNA

<213> Pinus radiata

<400> 1995

agcgcgctctc	tgtgaaaatg	gggagatctc	cgtgctgtga	gaaggctcac	accaacaaaag	60
gtgcctggac	ccaacaagaa	gatacccgcc	ttgtcgcca	cattcgagcc	catgggcaag	120
gcggtctggag	ctcgcttccc	aaggcagcag	gactgctgcg	ctgtgggaag	agttgcaggc	180
agcgatggat	aaactacctg	catccagatc	tgaagcggag	taacttttca	gaggaagaag	240
atgaactcat	cgtcagactc	cattcgctcc	tgggaaacaa	gtgggtctctt	attgcgggga	300
gattgccggg	gaggacagac	a				321

<210> 1996

<211> 402

<212> DNA

<213> Pinus radiata

<400> 1996

ccgcctccta	ccggggcgca	ccgacaacgc	tatcaagaac	cactggaact	cgactctgcg	60
acgtcgctat	catggcgaga	aagaccagag	caacgggcta	gctgtgaact	tggagtccgc	120
agctgaggac	aaagaaacga	tgactccgat	gacacctgtc	acagccacgg	caacggcaac	180
ggcaacggca	atgccagtg	ctttagtgtt	cccaacggct	gcagacaacg	tcagggaagcg	240
gagcaacagt	agctgcagcg	ctaatagcaa	tccaggagat	gccgaggctg	aatcctgtag	300
gcttaagagg	ctcaattttt	ctgaatcccc	atctagtctt	gaaaatatta	ataataataa	360
caataatgaa	gaagctgtta	gtggccattg	caattcggcc	gc		402

<210> 1997

<211> 375

<212> DNA

<213> Pinus radiata

<400> 1997

ttagcttgca	gaaaatgagg	tgcaaaacag	ggcaggcaca	agggcgattg	gaagttgaag	60
gcactcacc	tgctccttcc	aaaccaaagt	taagaaaagg	tctctggtca	cctgttgaag	120
ataaccagct	caccaactat	atcctgagaa	gaggcctcgt	cggctgctgg	aactatgtgg	180
ccaagcaggc	tggtctgcaa	agaaccggaa	aaagttgtag	gctgagatgg	attaactact	240
tacgccctgg	ccttaaacgt	catccaattt	cacgccaaaga	agagcagctc	atcatagaat	300
tacaatccat	tctcggtaac	aggtggtctc	aaattgcggc	acagttgccg	ggacgcacgg	360
acattgagat	caaga					375

<210> 1998

<211> 466

<212> DNA

<213> Pinus radiata

<400> 1998

acaacagctt	gaatctagtc	gaataaagct	gaaacaaatt	gaacaagagc	ttgagcgagt	60
gaagcaacag	ggaatttcca	tcaatggaca	tttgggcgat	cataatggat	caggggctgc	120

tgcatttgat	atggaatatg	gccgttgggt	tgaagaacaa	aacagacaag	cccgtgagct	180
cagggcttct	ttacaagcac	acctgacaga	tagcgaactt	tgtgttctgg	tggataatgc	240
tatagctcat	tatgatgaac	tctttcgtat	gaagggtgct	gcttccaagt	tggatgtttt	300
ccatcttatg	tcaggcatgt	ggaaaactcc	tactgagcgt	tgttttatgt	ggatgggagg	360
ttttcggcca	tcagagcttc	tgaagattct	tactccacaa	attgagcctt	taacagaaca	420
gcaatcattc	gcagtatcta	gcttgaaact	gtcatcacag	caggca		466

<210> 1999

<211> 243

<212> DNA

<213> Pinus radiata

<400> 1999

ctgagagtta	agtgattggt	gggagggaaa	agagaaaaaa	gaggagatca	agaatggtga	60
ggggaaaaat	ccagatgaag	aggattgaga	ataggccag	caggcagggt	acattttcca	120
agcgtagaaa	tggattgctg	aagaaagctt	acgagctctc	ggttctctgc	gatgcagaag	180
ttggacttat	gattttctcg	ccaggaggaa	agctctatga	attcgccaat	accagcatgg	240
aga						243

<210> 2000

<211> 642

<212> DNA

<213> Pinus radiata

<400> 2000

cgagcgcgaa	agactgaaat	attggtgact	gaaatagagc	aacttcaaag	aaaggaatgg	60
atattaagcg	aggagaatgc	tttcctcggc	aaaaagttcg	tgcatectca	ttccgtttcg	120
aaaactcctg	gaagtgaatc	gggaagcatc	caaaacagtg	aagtcgagac	gcaactgggt	180
atgagaccgc	catgtacaaa	tgtcattttt	cttattaata	gttctcattg	ataatcaatg	240
tattcgtaac	tgtgttatca	atattattatg	aaaattttat	attaataaaa	ggtaaagctg	300
cttctcatat	cgcacctaat	tgttcaccac	gtccaaaaaa	aggctcttgc	caagtgaact	360
aaatgttttt	tgaaccgaag	tctgtcttcc	aaactcagta	tgtaaagctt	ctatgaatac	420
atactttaaa	ggttttgtat	tagcattacg	agcggagttt	tcctcattca	tccgatgagc	480
atgaagagt	aggagtataa	tattgacgca	tgtggagaat	ttaatgttgc	atatactcct	540
acgtgtatat	atgtgatggt	ttatatatat	atatatatat	atataatata	gatttgaatc	600
tataaaat	ttaaattatat	atntagttta	aaaaaaaaaa	aa		642

<210> 2001

<211> 485

<212> DNA

<213> Eucalyptus grandis

<400> 2001

gagagagtct	gcaaactgcg	cgtcccgcgt	cgccgatcgc	cgggagaatc	gccgcggcg	60
agatatgggg	aaccagaagc	tgaagtggac	gaaggaggag	gaggaggcgc	tcctcgccgg	120
aatcgccaag	cacggcgccg	gcaagtggaa	gaacatcctc	aaggaccccg	aattcgcccc	180
cgccctcgtc	aatcgctcca	acatcgacct	caaggacaag	tggcgtaact	tgagcgtcgg	240
tacttctgga	caaggttcta	gagataaaca	aaggctgtca	aaagtgaaaa	gtctgatggc	300
cgctcctcag	tccagtaccg	tgctctctaa	tccacaagct	catgctgcat	ctactgatgt	360
tgcattgggtc	aattcttcaa	atagctttca	agatggcaaa	aattattcac	tgtgggtatc	420
tgtgctcctt	ttccttttca	gtaacggcaa	tcttttttac	ttctatcctt	tgttatcctt	480
tctgt						485

<210> 2002

<211> 356

<212> DNA

<213> Eucalyptus grandis

<400> 2002

cgactcgta	gtcagctcgt	gcactccttg	caattcatga	ttattttctcc	cgacttcggg	60
cccttagttc	cctctggctt	gcccgtccaa	gagaatgaag	aggctcatgg	ctatgcaggc	120

tgacatgtac	attggtgata	tttaggaagc	tatcagtttt	gaagtagttt	cggacctaga	180
actggtttat	ttctagtttt	cttcattttt	tttttctttg	gctataatta	ttttttcttt	240
cttagacacg	aagtccacaga	gaattgattg	atggtatgct	aagctatcat	aggttgggat	300
tgcattgttc	tcattgaaga	tactgctaata	tgtgtaggca	ctcctgttca	ttagtc	356

<210> 2003

<211> 713

<212> DNA

<213> Eucalyptus grandis

<400> 2003

tctccatcca	aattccacc	ttcctccctt	cctccctttc	cccccttcc	tccttctgca	60
ccgaaggaag	cccccgcttc	gcaagccacc	tctcggtaaa	gttcgctcct	ttttgggtcg	120
gcgaatcttg	ggtcgatacga	tggcttcgag	gaaggagggtg	gacggatca	agggaccgtg	180
gagccccgag	gaggacgagg	ccctccgcct	cctggtgcag	aagcacggcc	cccggaaactg	240
gtccctcatc	agcaagtcca	tccccgggag	gtccggcaag	tcgtgccgcc	tcgggtgggtg	300
caaccagctc	tccccgcagg	tggagcaccg	ggccttcacc	ccggaggagg	acgacatcat	360
cgtccgcgcc	cacgcccggg	tcggcaacaa	gtggggccacc	atcgcccgcc	tcctctccgg	420
gcgccaccgac	aatgccatca	agaaccactg	gaactccacc	ctcaagcgca	agtgtctccc	480
cccgtctctc	ccgtcgcgcg	aggaagggaa	caacagggcg	ttcgacgctg	ccgcggggta	540
cgacggggac	ttgagcccg	gggagcggcc	ggcgaagcgg	tcggcctccg	ccgggccttg	600
cctgagcccc	ggcagcccg	ccggatccgg	catgagcgac	tccagcgtgc	acttcgtgta	660
ccggcccgtc	gcgaagaccg	gccccgtggg	gcccccgacg	gtcgaggcga	cgg	713

<210> 2004

<211> 341

<212> DNA

<213> Eucalyptus grandis

<400> 2004

acaggttgct	caattaagag	ttgagaattc	tactttactg	aaacgtctct	cggacataag	60
ccagaagtac	aatgtagcag	ctgttgacaa	cagagttttg	aaagctgatg	tcgaaacctt	120
gagagcaaag	gtgaagatgg	ctgaagagac	ggttaaaaga	gtaaccggac	tgaacccaat	180
gctgcatgtg	atgtccgaca	tgtcttctgt	gggtgtgcca	ccatttgatg	gtagtccttc	240
tgatacatca	gcggatgctg	cagttcctgt	gcgagatgac	ccaaagcacc	aattctatca	300
aaccaattct	agtaaccccc	catcatctgc	tgacgatatg	a		341

<210> 2005

<211> 1403

<212> DNA

<213> Eucalyptus grandis

<400> 2005

ttctttcttc	accctctgtg	catgaatttt	cttggggccat	gctcatgcat	tctcctctc	60
tttcttcatc	accatcgctca	tcgtctctga	ctttgatggg	ttggcgaggg	ggggagctga	120
gggagaggga	gaggagagga	gagaggagcg	gctgtgcgtt	cgcggtgcagg	gctgcacgag	180
gtgttctcgt	ttcggggcgcg	ggcgctctgc	ttccatggct	gcttttaagt	aagacgcca	240
aagaaaacct	ttttgtctct	tcgagtgtca	tgaactcgca	ctgaaagtgc	gcgccgaacc	300
gagaagaaga	agaagaagaa	gaagaagaag	aaagagaaac	catcccctta	gaaaacgcga	360
aaaagagtaa	atagtaaaaa	gagcaagctt	gatcttactt	gatctaaaa	attaagatcc	420
ttctctgttc	gagagaagtc	acagtcctcg	tttttccaga	catgaagaga	cttggcagct	480
cagattcggt	gggtgctttg	atgtccatct	gcccaccttc	agaggaattg	cagcacagtc	540
cgagaaacgg	caaccccatc	taccacagca	gggacctgca	gtccatgctg	gagctgggcc	600
tcgacgagga	aggctgcgtg	gaggaccagt	ccgcggcgcg	cgggggggcac	gtcggcgggc	660
agaagaagcg	gcggctgagc	atcgaccagg	tcaaggccct	ggagaagaac	ttcgaggtgg	720
agaacaagct	cgagccggag	cggaaggtga	agctggccca	ggagctgggg	ctgcagccgc	780
gccaggtggc	cgtgtgggtc	cagaaccgcc	gcgcgcgggtg	gaagacgaag	cagctggagc	840
gggactacgg	cgtgctcaag	tccagctacg	aggcgctcaa	gctcagctac	gacgccctca	900
agcacgacaa	cagggccctt	cacaaggaga	taaaagagct	gaaatcgaaa	ctccgggaag	960
aagacgacaa	ccccgagagc	aatctctccg	tcaaagaaga	ggtcatcatc	cccggccaacg	1020
acgtgtcggg	caagatccgg	gccgcagacg	acggtgacga	cgacaccaa	cgctctcctc	1080

ccccccgat	caccgccccg	cctcgcgagc	tgagcttcaa	caatgggtggg	ctgaaggacg	1140
ggtcgtccga	cagtgaactcg	agtgaatttg	tgaatgaaga	gaacgcggcg	accagcagca	1200
gcagcccga	ccccgcgctc	cagagccacg	gcggcttctt	gaaattcatg	gggtcatcgt	1260
cctcttcggc	ctccccaccg	ccgtcgccac	cggtcttcct	cggcgggtgc	ttcagcttcc	1320
agttccagcg	agcgtaccag	cctcagcctc	agcctcctca	tcaccaccac	caccacagtc	1380
cgtacgtgaa	gatggaggag	cac				1403

<210> 2006
 <211> 283
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 2006						
gagaggtaca	agagtgcattg	cagtgaattcc	tcacatccac	agtccgtttc	tgacgtgaac	60
actcagtttt	atcagcaaga	agcatccaag	cttcggagac	agataagaga	aatccaggtc	120
tcagataggc	atcttctagg	tgaggggtata	agtgaattga	gcttcaagga	tctcaagaat	180
ctcgagagca	aattagagaa	atcgatcagc	cgtgttagat	caaagaagaa	tgagatgctt	240
tttgccgaga	ttgagtacat	gcagaagagg	ggccttgtgc	agg		283

<210> 2007
 <211> 252
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 2007						
agagaacaag	ataaacaggc	aggtgacctt	cgctaagagg	aggaatgggc	tgctcaagaa	60
ggcctatgag	ctctctgtcc	tctgcgatgc	tgaggctgcc	ctcattatct	tctccaccgc	120
cggcaagctc	tatgagttct	gcagcagccc	tagcatgtct	aaaacgctcg	accgttacca	180
aaagtgcagc	tatggatccg	ttgaagttaa	caaaccctcc	aaagaactag	agaatgccta	240
ccggggagtac	tt					252

<210> 2008
 <211> 386
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 2008						
tctagatcca	ccaccagcag	aaggaggtag	aagggggaga	aggaggagaa	ggaggaggag	60
atgggtagag	ggaagataga	gatacagaag	atagagaacg	acacgaacag	gcaagtgaac	120
tactcgaagc	ggaggaatgg	catcttcaag	aaagcccacg	agctcaccgt	cctctgcgac	180
gctagggttt	ccatcctcat	gctctccggc	aacaagaagc	tccacgagta	catcagcccc	240
accaccacga	caaaaaggat	gattgatgat	taccagaagg	ctcttgggat	cgatctgtgg	300
actacacact	acgatagaat	gcaagaggag	ttgaggaaac	tgaaggagggt	taataacaat	360
tttcggaagg	aaataaggca	gatatt				386

<210> 2009
 <211> 123
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 2009						
gagaaacctt	atgggggaag	atttggggac	cttgaactcg	aaggagctcg	agcagctcga	60
acgtcaactt	gaggcatcat	tgaagcatat	taggtcaact	aagactcagt	gcatgctcga	120
tca						123

<210> 2010
 <211> 581
 <212> DNA
 <213> *Eucalyptus grandis*

<400> 2010

cttagggcta	gcttgcttac	atcttcacca	tcttctgcgt	agtttcaaca	ttttagagtt	60
gaagaaaagg	agaaaaaact	aggcaaaactt	gcgaccatgg	tttttccaac	ccaagccacg	120
cccgaggagt	ccccgcagag	gaaaatgggg	aggggaaaga	tcgagatcaa	gcggatcgag	180
aacacgacga	atcggaagt	gactttctgc	aagcggcgga	atggcctcct	caagaaggca	240
tatgaactct	ccgttctttg	cgaagccgag	gtcgccctca	tcgtcttctc	cagccgcggc	300
cgcctctatg	agtatgcca	cgatagtgtc	aaagcaacca	tcgagaggta	caagaaggct	360
tgctcagatt	cctccagtag	cggatccgtt	tctgaagcta	atgttcagtt	ttatcagcaa	420
gaatccgcca	agttgcaaca	acagattaat	aacatgcaga	acaataacag	gcaactggtg	480
ggtgactcaa	ttgctgggat	gaatatgaag	gatatgaaga	ctacggagca	aaaactagaa	540
aaagcaatcg	ctaaaattcg	cgccaaaaag	aatgcgattt	t		581

<210> 2011

<211> 538

<212> DNA

<213> Eucalyptus grandis

<400> 2011

tcagcacaag	gaacaaatgc	tggttgaagc	taacagagaa	ttaaggaaga	agctggaaga	60
gagcaatata	agaatccctc	tccgccttgg	atgggaagct	gaggatcaca	ataacatttc	120
atacagccgc	cttcccatgc	agtcgcaagg	attgatcttc	cagcccttag	gcggcaaccc	180
gacattgcag	atcgggtaca	atcctgcagg	ctcgaatgaa	ttgaatgttt	cggctgccga	240
ccaacatccc	aacggattca	ttcccggatg	gatgctctga	atcgttccgc	aagtgaactg	300
cttgctggaa	gttccatata	aagtacattt	tccagttttt	gctatgatat	atgactcttc	360
ttcttctgga	tgacctatac	gaagatccat	cattcgtgga	tattgtccat	ggacgtaccc	420
taaaaggaag	gacagtatga	atccaatcta	gcttactatt	ttgtataaga	ataaacatct	480
gtgctgctga	tatttggaat	tcattctatgt	tatttaatatga	aaaaaaaaaa	aaaaaaaa	538

<210> 2012

<211> 341

<212> DNA

<213> Eucalyptus grandis

<400> 2012

aggcagcaaa	gagctcgagt	ccttggaag	acagctagat	gggtcattga	agcagatcag	60
atcacgaaga	actcagtaca	tgtagataa	gctgactgat	cttcaacatc	gggaacagtt	120
gctccacgaa	gcaaacagga	ccttgaatca	acggttgatg	gaaggatacc	aagtgaatgc	180
gctccagtta	aatcaacatg	cggaggaagt	cggaggatac	ggatcatccac	cgcgcgcgcc	240
actgccgcca	cagccacttg	ctcagcctca	cagcgaagct	tttttcaatc	ccttggaatg	300
tgaaccact	ttgcaaattg	gataccagcc	cgatccagtg	t		341

<210> 2013

<211> 934

<212> DNA

<213> Eucalyptus grandis

<400> 2013

gcgccatgac	gcggcgatgc	tcccactgct	gcaacaagg	ccacaactcc	aggacctgcc	60
ccgtccgcgg	cggcggcggg	gaaggcgggg	gcgcggcggc	cgcctctccc	tcctctctcc	120
cctccacctc	ctcctctggc	gccgcggcgg	cggcggcggc	ctcggcctcc	ggcggcgggg	180
tgaagctgtt	cggggttagg	ttaacggacg	ggtcgatcat	gaagaagagc	gccagcgtgg	240
ggtgcctgtc	cgcgcgccac	taccactcct	cgtcctccgc	cgcggcatcc	ccgaaccccg	300
gctcgtcccc	gatcgacggg	agcgacggct	acctgtccga	cgatcccgcg	cccggctccc	360
gctcgtccaa	tcggcgcgtc	gagaggaaga	aaggtaaccc	atggacggag	gaagagcatc	420
gaagggtttt	aattggtctc	cagaaattgg	gtaaaggaga	ctggcgaggg	atagctcgtg	480
actttgtgac	tacaaggact	cctactcaag	tggcaagcca	tgcccagaag	tattatatcc	540
ggcagagtaa	tgctggccga	agaaagaggc	gctccagcct	ttttgacatg	gctccagata	600
tggtactgac	tgaccaaccc	tcacatccag	aagaaacatt	tctgcctcct	ttggtcagac	660
ttaacgatga	tactaactca	acaacttcaa	ccagtatggg	actcgatttg	gaaagaacgc	720
ctatggagac	ctcgaccca	gaaacatctg	aaggggcgcg	tgatgttgcg	atggaatcaa	780
ttgatcaagt	acctcttgta	ccctgttact	tcccatacta	tttaccacta	ccctttccca	840
tgtggccgcc	caacatggcg	cctcctgaag	atggaagggt	ggtggagaca	tctcatcacc	900

gtgtgctaaa gccaatccca gtaattccaa aaga

934

<210> 2014

<211> 372

<212> DNA

<213> Eucalyptus grandis

<400> 2014

ctgggacact	tcttcttccc	ctcctacttt	acttgaatcg	gtcgacaatt	ttatcctgtc	60
tccagctaga	actggaaagg	ctgaatcaga	gtgtctttct	ccccgtaata	gtgggctgct	120
ggatgcttta	gttcacgagt	cgaagactat	gagcagtgcc	aaaaataatt	cacctgaaaa	180
aagtacaaat	tcatctgctc	tgacacctgg	tgatataagc	agttccactt	tgatattttg	240
caagtctgaa	tgggaagagt	atgggtgaccc	cattttctcca	ccggggccatt	ctgcaacttc	300
agttttcaat	ggttggtactc	ctttgagcac	tagtggaagc	tcactggatg	aacaaccgta	360
tcccgatacc	tt					372

<210> 2015

<211> 411

<212> DNA

<213> Eucalyptus grandis

<400> 2015

gcacataaga	aggaagctct	tgaaccgagg	gatcgatccg	gcgacgcacc	ggccattgaa	60
tgagcccgcc	caagacgcaa	ccactatttc	gttcgcagcg	gctccgtcaa	aacaagaacc	120
gcgagacgac	gccatcgccg	ccgcgctcgg	ctacaagaac	gagaacaacc	cgacaacaac	180
ggcagcaacg	gttcaagaaa	agtgtcccga	cttaaattctt	gagctcagaa	taagccctcc	240
ttgccagcag	cagcatcagc	ctgatgcgtc	gatgggaatg	gttgagggaa	atcactgctt	300
tgcttgcagc	ctgggggttg	agaacagcaa	ggagtgcagt	tgaggagag	gagcgagcgg	360
gggaagcagc	gcccattggcg	gctacgactt	tttgggggtg	aagacgagcc	g	411

<210> 2016

<211> 356

<212> DNA

<213> Eucalyptus grandis

<400> 2016

ctcgctcccca	agggtttttt	gcggaagtat	ggagttcccg	agtgaatttt	cagaggcctc	60
ttcacagaag	agaatcgggg	ggagagggaa	aatagagatc	aaacggatcg	agaacacgac	120
gaaccggcag	gtcacctttt	gtaaacgcgc	gaacgggttg	ttgaagaagg	cttatgagct	180
atcgggtgtg	tgcgatgctg	aagtggcgct	tattgtcttc	tcgagccgtg	gcaggctcta	240
tgaatatgct	aacaacagtg	tcagaggaac	aattgagagg	tacaagaaag	caagcagtga	300
ttcctccaca	tcccacagtc	cgtttctctg	agtggaacac	tccagtttta	tccagc	356

<210> 2017

<211> 356

<212> DNA

<213> Eucalyptus grandis

<400> 2017

agagagtaat	ggggagaggg	agagtggagc	tgaagaggat	agagaacaag	atcaacaggc	60
aggtgacctt	ctcaaagagg	aggaatgggc	tggtgaagaa	ggcctatgag	ctctctgtgc	120
tgtgtgatgt	tgaggtcgcg	ctcctcatct	tctccagccg	tggcaagctc	tatgagtttg	180
gcagcgctgg	cccttctggc	ataaataaga	cgcttgaacg	ataccaacgt	gacaacttca	240
ctcctcaaga	caacgttgct	gaacatgaga	cacaacagaa	ctgggtttcaa	gagatatcaa	300
aattgaaggc	aaaatatgaa	ctcttcaaca	aactccagaa	gcatttgctt	ggaaaa	356

<210> 2018

<211> 495

<212> DNA

<213> Eucalyptus grandis

<400> 2018

caaggaagca	acagtcttgc	tgcaaccaga	agctagtcca	aactagtggg	aggttgtggg	60
cgcttccagt	gctttgtaaa	gccaccccaa	gaaagcaaaa	accatcggtg	ccctaccaca	120
aagttcgag	cgttcgtaga	cgagaggagt	ctgttgattt	atccaagtgt	tgtttaaagt	180
agatctcctt	tttcggtgaa	catggctcgt	ggaaaagttc	agatgaagcg	gatcgagaac	240
ccggtgcacc	ggcaggtcac	cttctgcaag	cgcgcgcggg	ggctcctcaa	aaaggccaag	300
gagctctccg	ttctctgtga	cgctgacatc	ggcctcttca	ttttctcccc	ccacggcaag	360
ctctatgagc	tggccaccaa	aggaaccatg	aaggggctga	tcgagaggta	catgaagacc	420
acccaaagcc	aagctgctct	gaccgaggaa	gccacaccga	gccaaccact	ggatgccaaa	480
gaagagatta	acata					495

<210> 2019

<211> 613

<212> DNA

<213> Eucalyptus grandis

<400> 2019

agaaagagag	acagagatat	gggaagaggg	aaagtagagc	tgaagaggat	agagaacaaa	60
atcaacaggc	aagtaacatt	tgcaagaga	agaaatgggc	ttctcaagaa	agcttatgag	120
ctctctgttc	tctgtgatgc	tgaggttgcg	ctcatcattt	tctccaaccg	tggcaagctc	180
tatgaattct	gcagcagttc	tagcatgatg	aaaacaattg	agaagtacca	gaagtgcagc	240
tatggttcac	ttgagaccaa	ctgctccatc	aatgagatgc	agaacagcta	ccaggattat	300
ttgaagctaa	aaacaagagt	ggaggtcctc	caacgatctc	agagaaacct	ccttggggaa	360
gagttgggtc	ccctaaactc	gaaggagctg	gagcaacttg	agcaccagtt	ggagaattct	420
ctgaagcaaa	ttcggctctgc	aaagacccaa	ttcatgtttg	atcaactggc	tcattcttcag	480
cacaaggaac	aaatgctggg	tgaagctaac	agagaattaa	ggaagaagct	ggaagagagc	540
aatacaagaa	tccctctccg	ccttggatgg	gaagctgagg	atcacaataa	catttcatac	600
agccgccttc	ccc					613

<210> 2020

<211> 564

<212> DNA

<213> Eucalyptus grandis

<400> 2020

atcccccttg	cttggtcaac	tctctctttc	tccccctcct	tctactgcga	atatcatatc	60
cgaagctttg	gcttcgacga	cgaggctcac	ggaaattaga	gaaccatgag	gaagccttgc	120
tgcgacaagc	gggacaccaa	caagggggcg	tggtccaagc	aagaggacca	gaagctcatc	180
gattacattc	aaaagcacgg	cgagggtagc	tggcgaactc	ttctcaagc	cgcgggtctg	240
ctccgttgcg	gcaagagttg	ccggctgaga	tgataaaact	atctgaggcc	ggacctcaag	300
agaggcaact	tcgcagagga	tgaggaagat	ctcatcatca	aacttcatgc	actcctcggc	360
aaccgggtgg	cgcttatagc	tggaagggtg	ccgggacgta	cagataacga	agtcaagaac	420
tattggaatt	ctcacctaag	gaggaaactc	ctaaagatgg	ggattgaccc	caacaatcac	480
cggttgaacc	aaaatctccc	tcgctctcaa	acccggatgc	ctcggcagca	cttcctcatc	540
cagtatgaag	accacatgac	cctg				564

<210> 2021

<211> 410

<212> DNA

<213> Eucalyptus grandis

<400> 2021

tggaagctct	gcagcaatct	ctcgtggaca	cactttcttc	gaccacactg	agtcctactg	60
gttcaggcaa	cgtcgcagaa	tacatgggcc	aaatggctat	tgcatggga	aagttggcca	120
ctctcgaaaa	cttcgttcac	caggctgacc	tcttgagaca	gcagacgctc	caacagatgc	180
atcgatatt	aaccacccgc	caagcagccc	gcgctcttct	cgcatcaat	gactacatct	240
cacgtctccg	agctctaagt	tcattatggt	tagctcgtcc	taggactgaa	aacatctgtt	300
ctgctaaact	cttctgatgt	aatcgatagt	tttgattgaa	attaacgttt	ctagtgggga	360
tccatttact	gcgactgtag	cgattcgggc	cacatttata	taaaagctat		410

<210> 2022

<211> 328
 <212> DNA
 <213> Eucalyptus grandis

<400> 2022
 cgacccggtg atgaagccct ggcagatccc atgtccgata caacccataa tagcgtccgc 60
 agacctgttt gagtgctgat gtatcgattg ctgttgcaaa tgtggaacta gcgctttgga 120
 ttttagtctc tttacctctg tgtttgatgt gaatattgtc cgatgtctct gatgttctta 180
 cttcatcttg ttggcagtgg taaaatgtca gtttcgtgtc tgttgactgg attggctctc 240
 ttttttgtag aaggggggtgt cgtttttcac cctcattagc ttgtgaaatt tgcgatgatga 300
 tgaatggttg taacaaacct atattagc 328

<210> 2023
 <211> 380
 <212> DNA
 <213> Eucalyptus grandis

<400> 2023
 ccaacaagtc atatatectc gacttgctcc cagtggaaacg ccttccatta cttaatcgct 60
 gctagcgcta aacccccctc actcttcacc agcaaaaacg ccttttctcg cacacaaatg 120
 ggtcgctgta aaattgaaat acagccaata acgcacgagc gaaaccgatc tgccacattc 180
 ctcaagcgca agaacgggct gttcaagaaa gcgtatgagc tcggtgtgct ctgctctgtc 240
 gacgtcgctg ttatcatctt tgaggatcgc ccagggcaca gcccgaagct ctaccagtac 300
 tcgtctcgcg gtatccagga tattgtgcag aggcattctc atcacgacgg cgagactgat 360
 aaccgtggcc ctggggactt 380

<210> 2024
 <211> 322
 <212> DNA
 <213> Eucalyptus grandis

<400> 2024
 cgagacagaa ccttcttggt ggggcttgag aagcttggga aggggtgattg gagaggcatc 60
 tctaggagct atgtgaccac aagaacaccg gcccggttg caagtcatgc tcagaaatat 120
 ttctccggc aagtgaagctt caacaagaaa aagcggcgct cgagcctctt tgacatggta 180
 aaaaatcagt gctcctataa actattacca tcatatcggc tatcatcaat tagtttgatg 240
 ggggttgata aattcttatt gtataagggt gatgtcaaaa ccgcggcggg tgatcgttta 300
 ggcagtttga cggccaagcc ga 322

<210> 2025
 <211> 387
 <212> DNA
 <213> Eucalyptus grandis

<400> 2025
 gaaagaaggg agtagagaag gaggtgacat aaatttgcca cagaggcaac ggactttggg 60
 agagatgaca ttggaggagt tcctagttag agccggcggt gtgaggagg acacacaaat 120
 gatggcaagg cctggcgaca atggagtcca tgaagaaatg tcacaattca ctagtaatgg 180
 tctcgccagt agtgcggctg ctggaaacga tttcatattc tctagtaagc ctgctgggtc 240
 atcgtttagat tttattggaa ctagacctac tcagctacag caacaaccac agccacagcc 300
 gcttgaacca ccggtccgc tttttccaaa gccggaaact gtgtcatttg caacctccgt 360
 gcatctacca aatacagctt catatag 387

<210> 2026
 <211> 450
 <212> DNA
 <213> Eucalyptus grandis

<400> 2026
 gcgaatgctc ctctccggat tgccatgaac tccaacgctt cctccaaccc ccagtcgatg 60
 gccacctcca cgacgtcggc gaccacgccc gcggcgggcg gcgacggcgg caagaaggtc 120

aggaagccct	acacgatcac	caagtccagg	gagagctgga	ccgaggagga	gcacgacaag	180
ttcctcgagg	ccctccagct	gtttgaccgc	gattggaaga	aaattgagga	ttttgtgggc	240
tcaaagactg	tatttcagat	ccgaagccat	gcccagaaat	acttcttgaa	agtcctaaaag	300
aatggggcag	ttgcacatgt	tccacctcct	cgtcctaaac	gcaaagctgc	tcatccctac	360
cctcaaaagg	catcgaaaaa	tggttttagtg	ccgctgcaag	catccatggc	ccagccttct	420
tcaacaaatc	ctgctttttac	aattacacct				450

<210> 2027

<211> 786

<212> DNA

<213> Eucalyptus grandis

<400> 2027

ccaaacatcc	atccgtccat	cagctctaaa	ctttaattgt	aatcacatcg	tcctttctcg	60
acaccaactg	ggtcaaagtgc	ttaaaaaaag	gaaaaggaaa	agagaaagat	gacgtttcct	120
tccttctctc	ccaccacccg	tctcttctat	ttatctcctc	tctctctttc	ttcctccatg	180
agcgggtgct	ttcagggttg	atgcaccact	tcaactcaac	ctcaatacat	aaacgtcgtg	240
ttgggaaaaag	gataaaaggca	gggagaagga	gatggggagg	tcaccgtgtt	gcgagagcga	300
gcacatgaac	aaaggggcat	ggagcaagga	ggaggacgag	cgctcatcg	cctacatcaa	360
gcgccacggc	gaaggctgct	ggcgatccct	tccaaaagca	gccggcctgc	tgcgctgcgg	420
caagagctgt	cgcttgagg	ggatcaacta	cttgaggcca	gatttgaagc	gtggtaactt	480
ctccgacgaa	gaagacgagc	tcattatcac	cctccacagc	ctcctcggca	acaagtggct	540
gctgatagcg	gcacggttgc	cgggaaggac	agacaacgag	attaagaact	actggaacac	600
ccacatcaag	agaaaagcttc	acgcacgcgg	gatcgatccc	caaaccacc	gtcctcttcg	660
actacaccag	cactgctggt	gctggtgctg	ctgccacttc	acactatctg	ttctaacgct	720
aacaacagcg	gcaacaaggc	cacgcctcac	tcgacgactt	gtgaagaatt	atcatcatca	780
tcaaca						786

<210> 2028

<211> 476

<212> DNA

<213> Eucalyptus grandis

<400> 2028

agaagcgctg	agttcttggt	caaagtctag	cagtttcggg	ttctccatca	atcgagtcgg	60
agtgggagaa	aatgagcaca	aatgggttgc	tgaagtttga	ccaaagtctt	tagtgagatg	120
gttgctgtct	cccgttctcc	tccaaacaga	tgtctgatca	aataacttac	ttgaccgcca	180
gtatgaactc	tccttttagcc	cagcttggtta	acccaagaag	gatgcacacc	tacgagccat	240
ttgaccagtt	ccccatgtgg	ggagacacct	tcaaagctga	caaggtcaaa	aatctcgagg	300
catcgctcatc	tgtgatcggt	catgcagtag	atgatggatt	ggacaagaag	tttgaatatg	360
tttctcatga	atcggcagaa	aattccagct	ccaggagcga	tcaagaagca	aatagacctg	420
acaaggtaca	gagacgtcta	gcacagaacc	gtgaagctgc	tcgaaaaagc	cgtctg	476

<210> 2029

<211> 535

<212> DNA

<213> Eucalyptus grandis

<400> 2029

cagccggatg	taccttagtg	tactgaatag	cctaaagcca	tggttcctatc	agatgttaac	60
ttgcatatgg	aaatgaatat	tacaacatgc	gcgctttctt	gagttttttt	tcctctgtga	120
gttgacgcgc	aagaagcgct	gagttcttgg	tcaaagtcta	gcagtttccg	ggtctccatc	180
aatcgagtcg	gagtgaggag	tatgaactct	ccttttagccc	agcttggtta	cccaagaagg	240
atgcacacct	acgagccatt	tgaccagttc	cccatgtggg	gagacacctt	caaagctgac	300
aagggttaaaa	atcttgaggc	atcgctcatct	gtgattgtgc	atgcagtaga	tgatggattg	360
gacaagaagt	ttgaatatgt	ttctcatgaa	tcggcagaaa	attccagctc	caggagcgat	420
caagaagcaa	atagacctga	caaggtacag	agacgtctag	cacagaaccg	tgaagctgct	480
cgaaaaagcc	gtctgcgga	gaagaaatat	gtacaacaac	tagaatcaag	ccgct	535

<210> 2030

<211> 723

<212> DNA
<213> Eucalyptus grandis

<400> 2030
gtgaggcgct gcctccacca ccaccgccgt cccaccgcgc gccgcccga ccaccaccac 60
caccaccacc accacettat actgtacaaa taatcccttg gcctcggccg ttatagcctc 120
ttactcaaaa atcagttttt acccttttct gttgcgtagt cgtagttttg ggccaggggt 180
tctattcggt atatgtagag aagtcagtgg gcgaaaccga gcgtcgagcg gtcggccatg 240
gcttctctct cttctgtagc ttccgcgagg aaggacgcgg atcggatcaa ggggccgtgg 300
agccccgagg aggacgaggg gctgcagagg ctgggtccaga gctacggccc ccgcaactgg 360
tccctgatca gcaagtccat cccggggcgg tccggcaagt cgtgccggct ccggtggtgc 420
aaccagctct cgccccaggt ggagcaccgc cccttcaccc cggaggagga cgaggccatc 480
gtccgcgccc acgccaggtt cggcaacaag tgggccacca tcgctcgct cctcaacggc 540
cgcaccgaca acgccgtcaa gaaccactgg aactccaccc tcaagcggaa gtgctcctcc 600
acgtgctcgg ccggcgggca cgacgccgac gccctcgcg agcagcagcc gctcaagcgg 660
tcggccagcc tcgggacgcc cacgggcggc aacaacgcg tctccgatct gttcttcagc 720
ccg 723

<210> 2031
<211> 412
<212> DNA
<213> Eucalyptus grandis

<400> 2031
gctctctctc tctctctctc tctctctctc tctctctgtg gtggctttct tctgtttttg 60
gctgtgatca gacaaacaaa aaccatctgg ttccggcgtct gaacaagaaa aaatttgaga 120
agggattcaa ggaagatggc gaaagagaag ataaagataa agaagataga caacttgacg 180
gcgaggcagg tgacattctc gaagaggaga agagggtga tcaagaaggc cgaggagctc 240
tccgttctgt gtgatgctga cgtgtccctc atcgtcttct cagccactgg caagctctat 300
gatttctcca gctccaggca gatgaaggga gaggatctgg aggggttaaa cgtggaggaa 360
ttggaccaat tagagaagaa actcgaggcg ggactgagcc tcgtgatcaa ga 412

<210> 2032
<211> 495
<212> DNA
<213> Eucalyptus grandis

<400> 2032
gagttaccac caccoccttg ttttattttc gatcctgcat ctctcaaaat gaggaaacct 60
gatgcctctg ggaagaacag ctccaacagc aacgctaaca agctgagaaa aggactctgg 120
tcgcctgaag aggacgacaa gttgatgaac tacatgctca acaatggcca aggtgctgg 180
agcgatgtgg cccggaacgc cgggctgcag cgggtgtggca agagttgccg cctccgggtg 240
atcaactact tgccggcccga cctcaagagg ggcgctttct ccccaacaaga ggaggagctg 300
atcatccact tgcattccat ccttggcaac aggtggctcg aaatcgcggc tcggttgccg 360
ggacggactg acaacgaaat aaagaacttt tggaaactga ccataaagaa gaggtcaaga 420
actcgtcatc atcttcttgt agacactcgg caaacacgag cgattctcct tgtcatcaga 480
cgttaaagat gtatg 495

<210> 2033
<211> 220
<212> DNA
<213> Eucalyptus grandis

<400> 2033
gccccgaga tcgcgcgcgc gctcgcggcc cctcgcggcg ggcaccaccg gcggggcgac 60
tccgaggtca atttccggat cccggaggac ctggatctgg ggcgggatcc gttcgagaac 120
gggccctccg ggagcttcga ggacttcgga tcggaggatg atctactcag cacctacatg 180
gacatcgaga aattcggatc aagctcgacg cgggcagggg 220

<210> 2034
<211> 445

<212> DNA

<213> Eucalyptus grandis

<400> 2034

cttctgagaa	tgtgtccggt	ggagccatcg	aacgtcccag	agccacggga	aaattggctg	60
cgccctgtaaa	ctcgcccagc	atgtcctcat	cattggacct	gaagaattct	tgcattggatg	120
caaattgccaa	ccctgtgagc	atctttgcaac	ctgggtgtagt	gccacctgaa	gcctgggttac	180
aggtaattgtc	actctgtggt	aggttactta	aaataatttcc	ctggaaggcc	agtactttctg	240
ttctttctgct	tgtttcttca	agttgctctc	tacaatatca	tcgactttgt	ttctcaaaat	300
tcgctttgtg	taagaatgaa	agagaactga	aaaggggagag	gaggaaaacag	tcgaaccgtg	360
aatctgctag	aagatcaaga	ctgaggaagc	aggctgagac	tgaagaactt	ggcaaaaagg	420
tggattctct	gagtgccgag	aatag				445

<210> 2035

<211> 349

<212> DNA

<213> Eucalyptus grandis

<400> 2035

tttttttttt	gtatataatc	tctttatttc	tagttaggga	aaattcagaa	agaagccgtg	60
aaggaaacttc	atccaatggc	gatggaaaat	ctgaagtgc	aggaaagggt	gctggggagg	120
tggatgctgc	ttctgagaat	gtgtccggtg	gagccatcga	acgtcccaga	gccacaggaa	180
aattggctgc	gacctgaaac	tcgcccagca	tggcctcatc	attggacctg	aagaattctt	240
gcatggatgc	aaatgccaac	cctgtgagca	ttttgcaacc	tggtgtagt	ccacctgaag	300
cctgggttaca	gaatgaaaga	gaactgaaaa	gggagaggag	ggaacagtc		349

<210> 2036

<211> 648

<212> DNA

<213> Eucalyptus grandis

<400> 2036

gagagagaga	aagccagaga	gagaaagagg	aggatthttgg	atgaacgtat	attcattggg	60
agggtgctagt	catggggagg	caaccgtgct	gtgacaaaatc	cgggggtgaag	aaaggaccgt	120
ggacggcgga	ggaggacaag	aagctcatca	acttcaccc	caccaacggc	cactgctgct	180
ggcgtgccgt	ccctaagctt	gccggcctcc	gccgtgctgc	caagagctgc	cgctccgct	240
ggaccaacta	cctccgcccc	gacctcaaac	gcggcctcct	cagtgaggct	gaggagcagc	300
tcgtcatcga	cctccatgcc	cgccctcgga	acagggtggc	gaagatcgcg	gcaagggtgc	360
ccggggagAAC	cgacaacgaa	ataaagaacc	attggaacac	ccacatcaag	aagaagctgc	420
tcaagatggg	gacgatccc	gtgaccacg	agcccttgaa	caagcctcag	aaaactccat	480
ccgaacacga	cccggaagct	tctctgtcgt	catcgcaagc	ggaccctacg	tccgaatcgc	540
ccgccaacac	gcaccaaccc	aacaacgccc	acgcggacga	agtacaactc	gtcctcgtcc	600
tccccgtcgg	cctgtccgcc	gagaactggt	gctccggcag	ggacgagt		648

<210> 2037

<211> 268

<212> DNA

<213> Pinus radiata

<400> 2037

ctgagcagaa	atatggatga	cgtatttgtt	cagcgctgca	acagaaactt	tacagctcga	60
gatcggctaa	tctctaaaga	gagaaggaat	ttcgggtggg	tttgtggcgt	tactgaagag	120
gaagaagaac	ttattatcag	aatgtataag	ctcgtgggca	acagggtggc	attgattgct	180
ggcgcccttc	ctggtcgaaa	agctgaagag	attgagagat	attggaagat	gagaagcata	240
aatgctgcac	ctctgaagcc	taatacct				268

<210> 2038

<211> 1055

<212> DNA

<213> Pinus radiata

<400> 2038

ggcgaatcga	gctccagtct	ctgcccttag	gcacacgtac	aacatacgtg	gctaacagag	60
ataacaccca	aagcctatcc	agccatgggc	gatggatggg	tggacagtga	tacaggcagg	120
agaggggttca	gctggaccac	agttttggat	agaatgggtg	cttttgctc	ctcggctctt	180
actaatcttc	tgactttggc	agtatgtctt	cogtgatata	tttaatgtgt	atacgttctt	240
ttggggattg	cgagacagca	gatccaagtc	tgggctgtgg	atctggaacg	catttttaagc	300
tctgggtctct	tcaattgggt	ttctggtagc	gagctccatc	acaatgggtca	aagaattggt	360
gatgatgtgt	tccaactgtg	ggcacagtgg	gcacagctcc	agagcctgtc	ctgatagagg	420
atctgtcaaa	ttgtttgggg	tcaggctcat	tgctacagac	gatggcatgg	cctgcatgag	480
aaagagcctc	agtatgggca	atctcgggtca	ttaccgttca	ctttacaatg	tcaatcactg	540
ttctgggaca	agcgaatgtg	gatctgcaga	tcaggatggg	tatttgtctg	atggatttgt	600
tcattcttcc	agcaatgcac	gcgagaggaa	aaaaggcgtc	ccatgggtcgg	aggaagagca	660
caggatgttc	ttgtatggac	tggaaaagct	tgggaagggt	gactggagag	ggatatccag	720
gaattttgtg	acgaccagaa	caccacacac	agtagccagc	catgcccaga	agtattttct	780
aaggcagagc	aatcttaata	aaaggaaacg	tcgatccagt	ctctttgata	tgtgtcctca	840
tgattcccat	gtcacaagct	cttttcgcag	agaagactca	ttgggaaacc	tttatgaatt	900
ttcgccaaaa	cattcggctt	tgggggtatc	gcctaatttc	gaactatatt	catttgggtgt	960
ttctccaact	ttatctctag	gaagatccct	gcaaccagtg	gaagcagttc	ttgaagagaa	1020
agcagcccat	tatcatcctg	tgaactcaga	agaag			1055

<210> 2039

<211> 167

<212> DNA

<213> Pinus radiata

<400> 2039

tggttacagc	tctgtagcgg	aatagatgaa	catgcagctg	gattctgttc	tcaacttgtg	60
tttgcaccaa	ttgatgcac	ttttgtgat	gatgtctctc	tggtctcctc	tggtttccga	120
gtaattcctc	tagaatcggg	atcagaatgt	ttctcctcca	aaacgga		167

<210> 2040

<211> 357

<212> DNA

<213> Pinus radiata

<400> 2040

ggagtgttga	aattcccctg	ttttgatctg	ataactatga	atctgatgga	gtcttttgag	60
gcaaagggaa	agggagagaa	gaggagaacg	gtgaggggga	aaaccagtt	gaagagaatt	120
gagaacggga	ccagcaggca	ggttactttt	tgtaagcgca	ggaatgggtc	gctgaagaaa	180
gcgtacgagc	tgtcagtgtc	ttgtgatgcc	gaagtggcac	ttattgtttt	ctccccaaag	240
gggaagctgt	atgagttcgc	taatcccagc	atgcagaaaa	tggttgaacg	atacgaaaaa	300
tgttcagaag	gaagtaacct	gacgagtaca	gcaaaagagc	aagacgtcca	gtgttta	357

<210> 2041

<211> 438

<212> DNA

<213> Pinus radiata

<400> 2041

ccgaagcaag	atcagaaact	cgttacttac	atacaggagc	atggccatgg	cagctggagg	60
gctctgccgc	agaaagctgg	gttgctgaga	tgcgggaaaa	gctgcagatt	gcgttgggct	120
aactatctaa	ggccagatat	caagcggggg	aagttcactg	tgagggaaga	gcagactatt	180
attcaacttc	atgcactact	tggaaacagg	tggtccgcca	ttgctactca	ccttcccaag	240
cgaaccgaca	acgaaatcaa	aaactactgg	aatacccacc	tgaagaagcg	cttgctgcag	300
atgggaatcg	accccgtagc	gcacaagccc	aagtccgaat	cgattatggt	acctggtggt	360
cagtcgtcca	atgggtcctc	gaatctgagc	catatggcgc	agtgggagag	cgcgcgcctg	420
gaagccgaat	cgaaggct					438

<210> 2042

<211> 319

<212> DNA

<213> Pinus radiata

<400> 2042

ggaatttttca	ttggaggaag	ttgtgttggt	ggggatcaaa	gtcattcaat	gagtggaaat	60
ggagccctag	catttgatat	ggagtatgct	cggtgggttg	atgagcatca	tcgacagata	120
aatgaactga	ggtcagcagt	gaactcacat	gtgggggaca	atgagctgcg	tggtctgggt	180
gaaggtgtca	tgggacatta	cgatgaaatt	tttcgtctga	agactgtagc	ttcaaaagct	240
gatgtctttc	atctgggtctc	tggcatgtgg	aagacgcctg	cagaaagatg	cttcatgtgg	300
atgggaggat	tccgtcctt					319

<210> 2043

<211> 404

<212> DNA

<213> Pinus radiata

<400> 2043

aaccggagag	caagaacaaa	gtggaaacgc	aacgaagtgg	agtgcgataa	tctgaaacgg	60
tggttgcgaga	gtctgagggg	ggagaacaga	agattggaga	aagaagtgca	gtcgtcgaga	120
gccatgaaag	tcccgagcgc	acccaattcg	atgcctctgg	cagccgccac	cctcgcaatg	180
tgctccggcct	gcgagggcct	tgcaatcaag	aaccgcggcg	cgcgcacttc	ctccaccgag	240
aagtcacaa	aatccctcct	tacaattatg	gggattgggg	atgtaaatat	gatatccaaa	300
aataacccaaa	ccccttcaat	gggaatggga	gatgaaatga	attgaagaaa	gtgaacttaa	360
aaaaaaaaaa	aaaaaaactc	gagactagtt	ctctctctct	cttc		404

<210> 2044

<211> 379

<212> DNA

<213> Pinus radiata

<400> 2044

ctggaacctg	atagaagaga	agattgaagg	aagatcagga	aagagctgca	ggcttcgggtg	60
gtttaatcag	ttggacccaa	gaatcaaccg	aaggcctttc	actgaagaag	atgaggagaa	120
gctactggca	gcccacgtt	tatatgggaa	taaatgggcc	atgattgctc	gcttatttcc	180
tgggagaact	gataacgctg	tgaagaacca	ctggcatggt	atcatggcca	ggagatacag	240
agagcaatcc	agtgcctttg	ggagaaggaa	attgcctcaa	gttcatagaa	gagagaaacg	300
tgcttgcact	gatgatgaaa	cgaggatggg	cagcagcagc	tgcaacatgt	gggtggataa	360
atatagctct	ctcaaatct					379

<210> 2045

<211> 369

<212> DNA

<213> Pinus radiata

<400> 2045

ctcattgctt	acattcgagc	caacggcgaa	ggcagctggc	gttcccttcc	caaggctgca	60
gggctgccga	gatgcggaaa	gagctgtagg	ctaagatgga	taaactacct	gcgtcccgat	120
ctcaagcgtg	gaagcttcac	agaagaagaa	gacgaactca	tcatcaaact	ccactccgtc	180
gtcggcaaca	agtggctctc	tattgcagga	agattgccgg	ggcggacgga	caacgagata	240
aagaactact	ggaacactca	catcaagaga	aaattgctga	tcaagggaat	cgacccccag	300
tcccatcgtc	ctctcgggca	gccctacagc	agcaacaata	tgcccgctctc	tgggtatttt	360
ctgacctcg						369

<210> 2046

<211> 530

<212> DNA

<213> Pinus radiata

<400> 2046

ctttccaata	ttgagcccaa	gcaaatcaaa	gtttggtttc	agaatcgaag	gtgccgagag	60
aagcagagga	aggaagcctc	gaggcttcag	actgttaaca	ggaagctgac	ggcaatgaac	120
aagttgctca	tggaggagaa	cgatcgccct	cagaagcaag	tttcacagtt	ggtgtatgag	180

aatgggttaca	tgagacagca	gctacagaat	gcattctgtgg	ccgccacaga	cacaagctgt	240
gagtcctgtgg	tgactagtgg	tcagcaccaa	cataatccaa	cacctcagca	ttccccaaga	300
gatgctagcc	ccgctggact	cctgtctata	gcagaggaga	ccttgacaga	gttcctttca	360
aaggctaaag	gagctgctgt	cgattgggtc	cagatgcctg	ggatgaagcc	tggtccggat	420
tcgattggta	ttgtagctat	ttcaaatact	tgtaatggag	tagctgcacg	tgcttgcggt	480
cttgtaggat	tagatcctac	aaaggttgca	gagatcctta	aagatcgccc		530

<210> 2047

<211> 358

<212> DNA

<213> Pinus radiata

<400> 2047

gctctaccag	tgtcaagcct	tgtttgaaaa	tggcgcagtc	gaaaaactct	caagaacctta	60
taatgatcta	tatgatgatt	taaaagaaga	aatactgtcg	tggctgccag	tggaatgtgt	120
gtgcagattt	cgcagcgtct	caaagcagtg	gaataatctc	ctgtcatcac	acaatttcat	180
aaaaaaggta	tgagaaaaga	agcctgctaa	catgaaccca	tggctcgttc	tgcatcctgt	240
caactcctcc	tattgtttgg	catactgctt	cttcacaaga	acctggaaga	ctacctcttc	300
tatctccatt	gaaaatgccg	ataattatgg	agaaaacgga	atcttgggga	tcagctgc	358

<210> 2048

<211> 376

<212> DNA

<213> Pinus radiata

<400> 2048

aagacaagaa	gctcattaat	ttcctgacta	ctcatggcca	atgctgctgg	cgcaccgttc	60
cagagcttgc	cgggatttca	agatgcggaa	agagttgcag	gctgagatgg	acgaattatc	120
ttcgccccga	tttgaaacga	ggagtcttct	cagagtcgga	ggagaaaactt	attttagatc	180
ttcatttcg	tggttgtaac	agatgggtcg	agattgcctc	gtttctgcct	gggcgaaccg	240
ataacgagct	aaagaactac	tggaacaccc	acatcaagaa	gaagctgaag	cgcattgggac	300
tcgacccccg	cgacgcacag	gctatttcag	aaacactacc	acagccagcc	cctgtagctg	360
agaataatga	tgtccc					376

<210> 2049

<211> 656

<212> DNA

<213> Pinus radiata

<400> 2049

caaacaatca	tcacgagatg	aaattccctt	cagaatggga	tttctgagat	tcgataccttg	60
atctgttgct	gcatctgat	cacattttat	tggttggttta	gggtttaagt	tttctctgct	120
aatggcatcg	atgaaaggaa	aatctccggg	tcacgatgag	cccgatcgga	tcaagggggc	180
ttggagcccc	gaggaggacg	cagcgtcgca	gcatttctgt	cagaaatacg	ggccacgcaa	240
ctggctactg	atcagcaaag	cgattccccg	ccgatctggc	aagtcctgca	ggcttcgatg	300
gtgcaaccag	ctgagcccc	aagtcgagca	ccgccccctc	actcctgaag	aggacgccc	360
tatcgtgaga	gcccacgccc	agcacggcaa	caaattgggc	acgattgctg	gcattgctcag	420
cggcagaacc	gacaacgcta	tcaagaacca	ctggaactcc	actctcagga	ggcgttgcca	480
aggtgggggc	gccctcgtca	tcgacgacga	gatctccagc	ggcgcgacg	ggtttcgaaa	540
acggaacctc	agcgaagacg	ccgatgccag	ccggaaattc	aagaagctca	gcctcggggc	600
gacgacaacg	accacgacca	cggagcctag	cacctcctcg	gcctcggatc	ggagcg	656

<210> 2050

<211> 466

<212> DNA

<213> Pinus radiata

<400> 2050

atgggggaaga	cgaagatgga	gatgaaacac	attcaaaacc	ctagccgccc	ccaagttact	60
ttctcgaaac	gcaagaacgg	attgctaaaa	aaggcattcg	agctttctgt	tctctcgcat	120
gctgaagtcg	cccttatcat	tttctcgga	actggcaaga	tcagcgagtt	tgcaagccac	180

aacgacatgg	caacaatact	ggaaaaatat	cgcataataca	cgcaaacaga	aacagatgga	240
aacatggggg	cttcgctcgt	ccaaagcgtg	aagggatggg	ttcctaattt	tctcgagatt	300
gcgggattca	gtgtttgtgg	atgatcccta	ttattgcagt	gtgggttggg	gcacgagggg	360
tgcagttgac	tgcactcata	tgattggaag	gttggtgaat	cacaattgaa	agcgttgcac	420
gagaggatgg	acaatttgaa	aaaacaggaa	cgaaacatgg	ttggtg		466

<210> 2051

<211> 390

<212> DNA

<213> Pinus radiata

<400> 2051

gtttgaagta	gaattttacct	atcaattgcg	ttaaagatac	tctgttttcg	gccctgaacc	60
ctaccagggg	aacgcggcgc	catgtcttcg	aggagctgtt	cgttggtcgg	ccttaatggc	120
cacaattccc	gtacctgtgt	gggaagtggg	gtgatgctct	ttgggttcg	tctgacggat	180
ggaccaatga	gaaagagtgc	tagtatgaat	aatttgtcaa	acttatctca	atatgagcac	240
tcggtccgg	ctgaggttgc	cgtgaagggt	tttgatgggt	acgtctcggg	tgacctcggt	300
cattcatcca	gcaatgccc	tgagaggaag	aggggagtg	cctggacaga	ggaagaacac	360
cggatgtttc	ttgtcggcct	tcagagagtc				390

<210> 2052

<211> 312

<212> DNA

<213> Pinus radiata

<400> 2052

gtttgaaggg	gaacgcggcg	ccatgtcttc	gaggagctgt	tcgttggtcg	gccttaatgg	60
ccacaattcc	cgtacctgtg	tgggaagtgg	tgtgatgctc	tttggggttc	gtctgacgga	120
tggaccaatg	agaaagagtg	ctagtatgaa	taatttgtca	aacttatctc	aatatgagca	180
ctcggtaccg	gctgaggttg	ccgctgaagg	ttttgatggg	tacgtctcgg	atgacctcgt	240
tcattcatcc	agcaatgccc	gtgagaggaa	gaggggagtg	ccctggacag	aggaagaaca	300
cggatgttt	ct					312

<210> 2053

<211> 393

<212> DNA

<213> Pinus radiata

<400> 2053

cgaggctcag	tccagctgag	gaggatcgaa	aacaaaatca	gtcgtcaagt	aactttttct	60
aagagacgga	acggactgat	gaaaaaggcg	gcggagctgt	caatactgtg	cgacgctgaa	120
gtggccttaa	tcgtcttctc	caacaaagac	aaactgtacg	agttcgccag	ttccagtatg	180
accaagattt	tggaaagata	tcggaagcgt	tcaaatttaa	tacaagatat	cggtaaagat	240
ccacagaatt	cagacattga	gttgacgcgt	ctaaaagaag	agggttgaccg	cttacaaga	300
tccagaaggc	atcttttggg	tgaagacctt	catcaactag	gtgctacgga	tctgcaacac	360
ttagaacaac	agcttgaaga	agcgtttaca	aag			393

<210> 2054

<211> 210

<212> DNA

<213> Pinus radiata

<400> 2054

cacagttctg	gaacctgtta	aagagaaaatc	agtcgaggtc	aaactccttc	tgtttgcacg	60
aggatgcccc	gcattatgga	gaagcaaaaat	agtgggtgaag	atagtgatag	caagggtcag	120
cttgataatg	gcaagtatgt	ccgttacacc	aatgagcagg	tggagacttt	agaacgtgct	180
tataatgaat	gtctaaagcc	cagcacaagg				210

<210> 2055

<211> 385

<212> DNA

<213> Pinus radiata

<400> 2055

aaaattgaga	atactacaag	ccggcaggtt	acattctgta	agcgggaagaa	tgggttgctg	60
aaaaaagctt	atgagttatc	tctgctgtgc	gatgcagaag	tggctctcct	cattttctcc	120
accagtggga	gactctatga	atttgcgaa	aagagtgtta	gcgcgacaac	ggagcggtag	180
atgagaacct	atgcagagaa	catgcctcag	tctcgagctc	tgtatccgga	ttgtcaccat	240
tggcaagagg	aagtcagaaa	acttacacag	caacgtgata	gtctaaccaa	ttcgatcaga	300
caaataatgg	gtgaaggcct	tgaatcatta	agcatgaagg	agctcaagca	tattcaagtt	360
caattggaaa	aaagtattag	ttgtg				385

<210> 2056

<211> 545

<212> DNA

<213> Pinus radiata

<400> 2056

tgaagacctt	gatgattgta	tccatccacc	ggagaagaag	agaaggctga	ctgctgacca	60
agtgcagttc	ctggaacgaa	gctttgagat	cgaaaacaag	ttggaacctg	agcgcaagat	120
acagctagcc	aaggagttgg	gcctccaacc	taggcaagtt	gcagtctggt	ttcaaaaccg	180
gcgggcaagg	tggaaaacaa	agcagttgga	aagggattat	gatattctga	aatcacgcta	240
tgagaatttg	agagttgatt	atgatagcct	gctcaaagaa	aaggataaat	taagggtctga	300
ggttaccttc	ctaacagaca	agctacacga	cagtgacct	gaagccctca	caaaggattc	360
tgagtctgct	gacaagaaa	tctatcccca	gcctgcctcc	cactctgact	gtgttgggga	420
gcctgaaaga	agtactgctg	ccaaggatac	accaccaggt	tgtaaacacg	aagatcttct	480
gagctctgga	acagatagca	gtggggtcct	ggatgaagat	agtcctcacc	atgttgactg	540
tggtc						545

<210> 2057

<211> 385

<212> DNA

<213> Pinus radiata

<400> 2057

aaacttgctc	acggattccg	acccttccgg	ctaaagctgc	tgcatttctg	tgtgtattga	60
agatggggag	atctccctgc	tgtgaaaaag	ctcatacaaa	caaaggggag	tggaccaaa	120
aagaggacga	tcgcctcatc	gccacattc	gaactcacgg	cgaagggtgc	tggcgctcgc	180
ttccaaggc	cgcagggtcg	atgcgctcgc	ggaagagctg	caggctccga	tggataaaact	240
acctgcgtcc	tgatctgaag	cgtggaaact	tctcagaaga	agaagacgaa	ctcgtcatca	300
aactccactc	cctactcggc	aacaagtgg	ctcttattgc	aggcagattg	cccgggcgga	360
cggacaacga	gataaagaac	tactg				385

<210> 2058

<211> 436

<212> DNA

<213> Pinus radiata

<400> 2058

aaagaagggt	gttccctgga	ctgaagaaga	gcacaggcag	tttttgatgg	gccttcgcaa	60
gtacggcaaa	ggcgactgga	gaagtatttc	tagaaacttt	gttgtgtcaa	ggacaccaac	120
ccaagttgcc	agccatgctc	aaaagtacta	cattcggcct	ggttcggata	ataaaaaacaa	180
gagaagatcc	agcatacatg	atatcaccac	tgttcattgg	acagacagga	tgcttctctcc	240
tttactgcac	gtttctaata	ggcagactaa	ttccccctca	acacaggcag	aaatgaatca	300
ttcaccatgt	ctggacatat	ccatctcaga	tttcacgagg	acctctaata	aactctttgg	360
gacctcaaat	agatggtaac	cttctatttt	cacctcacta	tcctctaaat	ctgtataccc	420
agagaggggt	tggggg					436

<210> 2059

<211> 624

<212> DNA

<213> Pinus radiata

<400> 2059

tttttattca	aatgacagca	cgacttccct	tcctcagatg	tttcccaggc	tgcactcatc	60
agctgcagca	ccacgcgggt	ttggattctc	cctgttcttt	gttctgttgc	gttaaagatt	120
ggttgacagg	cgaatcgccc	aggccgattt	gaattctcct	gaggattgac	aagatgacgc	180
gcaagtgtct	gcactgtggc	aacaacgggc	ataactccag	gacgtgccct	aaccgcggcg	240
gggtgaagct	cttcggcggt	cggcttaccg	atggcccgat	cagaaagagc	gctagtatgg	300
ggaatttgat	gatgatgtcc	aaccctagct	ctcccgtga	cccctccgag	ccggcctctg	360
ccgctgctgc	tgccgcggcg	gcggcggcca	gtggctatct	ctctgatggg	cttggtgaag	420
cctccacttc	ctccaattct	cgcgagcgga	agaaagggtg	gccatggaca	gaggaggaac	480
atagaatggt	tttgctaggt	ttgcagaagc	ttggcaaagg	tgattggaga	ggaatagcac	540
ggaattttgt	cataacacga	acacctacac	aggtagccag	ccatgcacag	aaatatttta	600
ttcgacagag	caatatgact	agaa				624

<210> 2060

<211> 364

<212> DNA

<213> Pinus radiata

<400> 2060

atcgaggaaa	accagaatct	tctcattttc	acttgctgtg	ggtttctctg	gactaacgat	60
gaagatgtct	ctaccttcta	atgttctcac	tctcagtgcg	gattccaatt	ctaattccaa	120
ttcgatctcc	tcgtcaggag	acgaactcgc	cgcaaagggtg	aggaagccat	acacaatcac	180
aaagcagaga	gagaggtgga	gtgaagatga	gcatcttaag	tttctggaag	ccctgaaaat	240
gtatggccga	gcatggaggc	gaatcgaaga	gcacataggc	acgaaaacag	ctgtccagat	300
acgaagccat	gctcagaagt	tcttctccaa	gttggttaagg	ggatcttcaa	ataaagggtg	360
gtct						364

<210> 2061

<211> 258

<212> DNA

<213> Pinus radiata

<400> 2061

gagggataga	catgaatcgg	ggtccggcta	ccaatgagtc	tgagtattcg	tcggttttcc	60
aggccgatgc	cttgccggacg	attgacactg	gttccgtggg	agtgaagcga	gagcgagaaa	120
gaacctttga	gttgaggcg	gagagggatc	gaacctgcga	cgtgagttcc	aggacaagcg	180
acgaggagga	gatagggttcg	acgaggaaaa	agcttcggct	ttccaaggag	cagtctgcac	240
tcttgaggga	aagtttct					258

<210> 2062

<211> 347

<212> DNA

<213> Pinus radiata

<400> 2062

aacttgaggt	cactcacgtt	gaaagaattg	caacaactgg	aaaagcaatt	aggcagggct	60
ataaaaaaga	tttataataa	aaagatgaaa	ataatttcac	aatgttgcaa	atcattatca	120
gaaaagggtac	gctctttgga	agaggagaat	agtgaacttc	ttaccaagtt	gattcctaga	180
gccgattcct	ccacttctgg	ggctgcgtta	tttgttgata	catccatgcc	aaaatctcac	240
tcagcaaccg	aagcatggcg	acaactcctc	cagcgagtcc	ttgtgacagc	agcgaagatg	300
gcgacaactc	ctccagcgag	gcacagtaat	tcccgaccga	accacta		347

<210> 2063

<211> 267

<212> DNA

<213> Pinus radiata

<400> 2063

tggaaggca	acatcgggat	ctgcaaatga	ggccatgtca	caaagtgggg	acagtggcgag	60
tgacggttca	agcgaaggaa	gcgaggaata	taacactcaa	actgagtcac	aagtggcgag	120

aaagagaagt	tttgatcaaa	tgatagtaga	tggagccaat	gctcagagta	ccaatattca	180
atcatataat	tcccaggctg	gagaacccta	tgtgacttcc	ggcgggcatg	caatgggtaa	240
tcccattagt	caagctgttg	ctgcagt				267

<210> 2064
 <211> 336
 <212> DNA
 <213> Pinus radiata

<400> 2064						
tcaacttaaa	tggaaggaac	ggatcttaac	cgaagagaac	ctttttcttc	gtaaaaagtg	60
tggtgatgaa	catgtggatt	gttcggcttt	tagaacacct	ccagcacaac	ttagaagcat	120
ccagaacatt	gatgtggaga	ctcaactggg	tataagacct	ccaactgtac	aacagcaccc	180
tgacgtcgat	agtcctcgat	aactgttgca	tatgcaaatt	ttctactttc	atgaaataaa	240
caaacagtac	acctcatttt	gttcgccttt	tgtaaacgta	taattactac	tgcataatgta	300
agctttcctc	tcaaaaaaaaa	aaaaaaaaaa	aaaaac			336

<210> 2065
 <211> 573
 <212> DNA
 <213> Pinus radiata

<400> 2065						
cgcagatcgg	gactgcaaac	agaaccatag	ttctgcaaca	ttcaatggga	cggactcctt	60
gttgtctgaa	agtgggactc	aatcgagggtc	cctggacacc	cgaggaggat	ctttgcctct	120
caaattacat	cgaagctcac	ggagaaggcg	ggtggagaac	acttccaaag	aaagcagggtc	180
tgctccgatg	cgggaagagt	tgcatattgc	gttggatgaa	ttatctccga	cccgatgtga	240
aacacgggca	catattaccc	gaggaggaag	atttaatact	caggttgcat	cgtcttcttg	300
gaaacagggtg	gtctttgatc	gctggacgta	tgcccggcag	aacggataat	gaggtcaaga	360
actattggaa	taccacacct	agcaaaaagc	ttatcagtc	gggtatcgac	ccgcggacgc	420
acaaaccgtt	gtcagaatcc	gaagacatat	gttcgagtc	cgggaatagc	gaagtgagcc	480
gcaagtctca	acgggaaat	aacgctgaaa	taccaagaaa	agttgccgat	ggcgcagttg	540
atattcaaga	taaggaagag	gatatcacag	aag			573

<210> 2066
 <211> 407
 <212> DNA
 <213> Pinus radiata

<400> 2066						
atttaactgg	gattgcaagc	tgcttgtgtt	gtttctgtgc	ttcaagcgaa	gggaagggaa	60
gacattccta	gagaagaaaa	aaatcaatat	caatggggag	ggggaagatt	gaaataaaaa	120
tgattgaaaa	tacagcaaac	aggcaagtca	cattctctaa	gagaaaagga	ggacttctta	180
agaaagctca	cgagctctcc	gttttatgca	atgcagaaat	tgctctcatc	gttttttcca	240
acactggcaa	actccatgat	tggtcaagct	ccagcatgaa	aaaagttatg	gagaagtacc	300
agaaatcgga	tcaaggacta	ggacttatgg	actaccaaca	acaacagctg	ttgtgtgaaa	360
tgaaacgaat	caccaaagaa	aatgaaagcc	ttcgagctcg	tttaagg		407

<210> 2067
 <211> 407
 <212> DNA
 <213> Pinus radiata

<400> 2067						
atgcttttgtg	gccggttcaa	atatttgagc	tggttagct	tctctgggtc	agaaatggcg	60
gactaaagta	atagtgtgcc	ccgagggtctg	gtgttcgaat	ctcggtggcg	tgaaaggtca	120
aattttttctc	tcgagtttca	ttgattctga	aaaactggca	tagctatggc	gatgagcaat	180
gggagattgt	gtgaagattt	ggataggatt	aaggggccgt	ggagccccga	ggaggacgcg	240
tcgctgcaga	ggcttgttca	gaaatacggg	ccgagggaact	ggaccctgat	aagtaaagga	300
atcccggggc	gatccgggaa	atcgtgcagg	ctacggtggg	gcaatcagct	gagccctcag	360
gtggagcaca	gaccttttac	cccgtccgag	gatgctgcta	ttctgca		407

<210> 2068
 <211> 353
 <212> DNA
 <213> Pinus radiata

<400> 2068
 attttttctg tagatggtgt gaggacgtgc tgaatagttc ctaaatecgtt tcttccgcgt 60
 ttggtcatcg aacgagttcc tataactcgc caagaccagg ttcttcacgg actactaatt 120
 ttgggcttct acacatcttt cccggaagta gatggggcgg gcactaggaa gaacagaaat 180
 aaagaggata gaaaatgaag tgagcaggaa tgtgagtttt agaaagagac gacgtggatt 240
 gctgaagaag gctgcggagt tgtcaatact ttgcgatgca acagtgggcg ttgttggttt 300
 ctctccggcc gggaaacttt ctgaatatgc cagcacttcg gagcaaatgg ata 353

<210> 2069
 <211> 393
 <212> DNA
 <213> Pinus radiata

<400> 2069
 attcgaaacc ctaccaatcg gcactcatcc ttctacaaac gcaagggcgg tttgcttaaa 60
 aaagcatttg aacttgctgt tctctgtgat gctgaagttg ctctgataat cttctctgaa 120
 accggcagga tttacgagtt tgcaagccac gatgatgtga ccacagtatt ggcaaaatc 180
 cgaatacaaa cgaaaactgc cgaaaacgca atgccttcac cgcttcaaaa aacagagttt 240
 gatcaattac aagtcaggat gttgcaggag aagatagaca atttggagaa aacgaaaaag 300
 catatggtcg gtgacaattt ggagtcactg acgtggaagg aattgcaaca agtcgaaaag 360
 aaattaaagca aggctacaaa aataattgtg gcc 393

<210> 2070
 <211> 461
 <212> DNA
 <213> Pinus radiata

<400> 2070
 cagcctgtgg ctccctgaaag catcgctccct cctcatcagc cgccgcacaa ccaaacgccg 60
 aaccaataca tgcaaggatg gtgggtttga tatttaacat ttatcattat cagttacttc 120
 aatcacaaaca aaagcccaaa gcgtggtaaa ttacgaaatt agaattatat tatcattaaa 180
 aaaaaaccct attttcattg tatagcagta ggcttgattt actgctatga tagcggaggt 240
 tttattgggc aaacaaaccc tactgggtata ttagaccttc ttgtcgacaa agtttaattg 300
 cataaatctt gtatgctaata ctggccgcta aaagagcgat ggaaaaatag ttgtcccat 360
 cacaacacat gatatgttta aatccaacgt gtatgtgtct gcaaaatatt attatacact 420
 acggtttatc acatggtagt cgattcgcca taataaaaaa a 461

<210> 2071
 <211> 373
 <212> DNA
 <213> Pinus radiata

<400> 2071
 ggattccgac ccttccggct aaagctgctt catttctgtg tgtattgaag atggggagat 60
 ctccctgctg tgaaaaagct catacaaaaca aaggggcgtg gaccaaagaa gaggacgatc 120
 gcctcatcgc ccacattcga actcacggcg aaggttgctg gcgctcgctt cccaaggccg 180
 cagggtgat gcgctgcggg aagagctgca ggctccgatg gataaaactac ctgcgtcctg 240
 atctgaagcg tggaaacttc tcagaagaag aagacgaact catcatcaaa ctccactccc 300
 tactcggaac caagtgggtc cttattgcag gcagattgcc cgggcgagcg gacaacgaga 360
 taagaacta ctg 373

<210> 2072
 <211> 506
 <212> DNA
 <213> Pinus radiata

<400> 2072

ggactgcaga	ggaagacaga	aaactgggtga	atTTTTatcac	cctgcatggc	catggatgct	60
ggcgcgaagt	acccaaactt	gctgggtctgc	ttagatgtgg	caagagttgt	agattgcgtt	120
ggacaaatta	cttgcgcccc	gatttgaagc	gtggattatt	gtctgaatca	gaggagaagc	180
tcatcattga	tctacatgct	gccatagggg	ataggtggtc	acgaatcgct	gcgcaattgc	240
cagggagaac	tgataacgag	atcaagaatt	actggaacac	gaggatcaag	aagaaactgc	300
gccagatggg	aatcgatcct	gtgactcaca	agcctctcac	ccaaatgcaa	atgcagagca	360
cccctgcccc	gactctgctg	ctgcaagaaa	atgatacaga	gcagcagcag	caggagcaac	420
ataatgagcc	tgatcctgat	cagaatcaga	gcagcaatgg	cactgtggag	acattgggtct	480
cgagggccag	agaacccccac	gaccac				506

<210> 2073

<211> 494

<212> DNA

<213> Pinus radiata

<400> 2073

attcagatgg	aacaacaaca	atgtctacat	atgaaagaaa	agccagtctt	cgagaattct	60
atgctgttat	atatccttcc	ttgctgcaac	ttgaaggagg	tataacagag	atggaagata	120
ataagcagaa	actgatttgc	aaagaaagat	acaagaaacg	tgttgatgaa	gaaaggagac	180
atctttctga	gcttgatctg	gaacgtgaaa	aagagtgtgg	aatatgtatg	gagactcaga	240
ccaaagtgtg	attgcctaac	tgcagtcatg	caatgtgttt	gaattgctat	cggaatggc	300
atgcacgac	agaatcatgc	cctttctgca	gggatagctt	gaaaagagtg	aactcaacag	360
acttgtggat	ttttacaagt	aatgaagaag	ttgttgacat	ggaaacattg	ggcagagaga	420
acttaaaaag	gctatttaat	tacattgata	aattgccact	tatagtcca	gagagcctgt	480
tttatgttta	tgat					494

<210> 2074

<211> 1678

<212> DNA

<213> Eucalyptus grandis

<400> 2074

ctttttcttc	cctgtcctgt	ttctctgtgc	tcacatcttt	taatatacaca	ccgaggctgg	60
aattctgcc	ggagccgct	ctgggtgctg	ctgacatttc	acctagaagt	cacaaaaact	120
ttgtagttac	cattttcgga	aagattttga	ggaaacacgc	gcagagggag	agagagagag	180
tggaagagag	agaatctagt	ctctggatgg	ggaggcattc	ttgctgttac	aagcagaagc	240
tcagaaaagg	cttatgggtca	cctgaagagg	atgagaagct	tctgaggcat	atctctcagt	300
atggccatgg	ttgttgaggc	tctgtcccaa	agcaagccgg	tctacagaga	tcgggcaaga	360
gctgcagatt	gaggtggatt	aattacttga	ggcccgattt	gaaaagaggg	gcgttctcgc	420
aagatgaaga	ggacctcatt	attgagctcc	acgctgctct	tgggaacaag	tggtcgcaga	480
ttgcagcaaa	cttgctggc	agaactgaca	atgagataaa	gaacctgtgg	aattcttgcc	540
tgaagaaaaa	gctcaggcag	agaggcattg	accctgtgag	ccacaggcct	ctctctgagg	600
ttgagaatag	tgacgacaag	gacgcaacgt	cagggcagac	ccaagataag	gtctctcgtg	660
ggtcagttga	attgctgagc	cagctcaatc	cacaattctc	aagctccacg	acagcaagga	720
gcagtaaaaa	cagcaatttg	atggcaccaa	cattgagcaa	ggacacagtt	gcagatgggt	780
ttgtgagcaa	tcaccaagag	aactcgatga	tgaacagttg	catctcagac	tttgttgata	840
atctctctct	gcaacaattg	aactactcat	caagtgattc	cagattttct	aatctctgtt	900
tcacccaaac	gggcagagca	catggaaaca	ccatcttttc	cgacttcaat	tcgaatgtaa	960
tatctgccat	ttctcctccc	tcacttaact	ctttattccc	tactgcttca	atgggcttca	1020
acttcaagcc	atctaagtct	gtcccctcgg	cgaattcgac	ttcaagcgct	agcacaggaa	1080
ctgcagattt	tcacaacagt	ggctcctact	tcggggaacag	cttagtttcc	tggggattgt	1140
tagcagattg	tggctcgcca	gacaaggagg	ggctcgacttc	gatccatcca	ttggaagtcc	1200
accaaccggg	agacttcaag	tgggctgcgg	aatatctcca	gaacctctg	ttcatggcgg	1260
ccgcgctgca	gaaccaagcc	caggaacagt	ccaatttgta	caatcagata	aagccagaga	1320
cccagtttcc	tccagaccat	tcaactactt	ccatgtggga	tcacttacag	ggacatgaat	1380
ccttgagaaa	ttctttgaat	acgtgcggca	aggatatcca	gagattaacg	gcgtactcgc	1440
gacacaatta	gatagaggat	tatattagct	gatggagcct	cagctgttga	agcaggaggg	1500
gatcatttga	ttggtggcga	cttgagaatt	tgcagattgt	tatttggttac	aggtgtggac	1560
tataattttt	tttttttacc	ccttttcttc	tttcaatgta	catagttctg	atacaaaaaca	1620

tctgcatccc cttgcctttt acctatattt gctttaagaa aaaaaaaaaa aaaaaaaaaa 1678

<210> 2075

<211> 636

<212> DNA

<213> Eucalyptus grandis

<400> 2075

aaacagagag	agagagagat	catgagatac	ccagctccag	ctccagcttc	aaggggcaag	60
agcacgagca	cggcaacgcc	atgctgcagc	aaggtgggga	taaagagagg	cccgtggacg	120
ccggaggaag	acgaggtcct	cgccagctac	gtgaggaggg	aaggcgaggg	gcggtggcgg	180
accctcccga	agcgtgctgg	cctccagcgc	tgccggcaaga	gctgccgcct	ccgctgggatg	240
aactacctcc	gccccctcgt	caagagaggc	cagatcgctc	ccgatgagga	ggacctcatc	300
ctccgcctcc	accgcctcct	tggaaacagg	tgggtctttga	tagctggaag	aatcccgggc	360
cgacccgaca	acgagatcaa	gaactactgg	aacacccacc	tcagcaaaaa	gctcatcagc	420
caaggaattg	atccccggac	tcacaagcca	ttattgaacc	ataaccctag	ttcttcacta	480
gcagcccatt	tgcaagatac	ttataatgct	tcaacattca	caccgaaagc	aacttaccct	540
aatcctacag	taccagtgga	agaaaccggc	gacgaaaatg	atctgaaagt	gggcagacag	600
ccagctgggt	cagcctcaaa	acgcgggcgt	tgccaa			636

<210> 2076

<211> 862

<212> DNA

<213> Eucalyptus grandis

<400> 2076

caaacgtctc	cgttttctctc	caagctgaac	atggacaaga	agccagacga	cgacagtggg	60
aagtcccaag	atgtcgagggt	gagaaaagg	ccgtggacga	tggaagagga	tctcatcctc	120
atcaactaca	tagcgaatca	cggcgaaggc	agttgggaact	ccctagccaa	agctgctggg	180
ctaaaaacgta	ccgggaagag	ttgtcggctc	cggtgggtga	actatctgcg	acccgacgtc	240
cggagaggca	acatcactac	tgaggagcag	ctcctgatca	tggaactgca	tgccaagtgg	300
ggaaacaggt	ggtctaaaaat	tgcaaagcat	cttcccggaa	ggactgacaa	tgagataaaag	360
aacttctgga	ggactagaat	ccaaaagcac	atcaagcaag	cagaggcttt	ctctgggtcag	420
agctccgaga	tgagtgatca	agcaagcaca	agccacatgt	ccagcatgcc	agagccgatg	480
gagacctacg	actcaccgcc	gtcattccaa	ggcaacaaca	acatggagcc	tttgccgggtg	540
aatttgtcgg	tcgagtcaaa	tgaagcctac	tggagcatgg	acgatctttg	gtctatgcag	600
ttactcaatg	gggattgatc	gcggggtgac	gtatggtgca	gtaatcgaaa	tggttcggtt	660
acaataatag	ctagggtttgt	ttacataaaa	tggacattag	cttttatctc	acatatatat	720
ctacatacat	gtgctagttt	agaagttatc	tacaaatatg	tgcatgagtt	gtaaacgaaa	780
ctaccatctg	cagtttgcac	ccccgctatg	taatgactga	aataatgaag	cgagattatt	840
tggttaaaaa	aaaaaaaaaa	aa				862

<210> 2077

<211> 907

<212> DNA

<213> Eucalyptus grandis

<400> 2077

gagatggaca	agaaaccgtg	ctaccgcacg	caggatcctc	aagtgagaaa	aggaccatgg	60
actcttgaag	aggatctgat	tctgatggac	tacatagcca	accatggcga	aggtgtatgg	120
aactctctag	ctaaagctgc	tggctcttcaa	cgcaccggaa	agagctgccg	gctgcgatgg	180
ttgaattacc	tccgaccgga	tgtccggaga	ggtaatatca	ctcccgaaga	acagctcttg	240
atcatacacc	tgcaatccat	gtggggaaac	aggtgggtccg	aaatcgcgaa	gcatttgccg	300
gggaggaccg	acaatgaaat	aaagaactac	tggaggacca	agatccaaaa	gcacataatc	360
aagcaatcgg	aaactgagat	caacgatctc	actattcctc	catcatccgc	aaacgcgatgc	420
acagatcatc	gcgggggtctc	ggccgcaaat	acaatcgaga	tcgcctgttc	tccaccgtcg	480
gatcaaggcg	gctccggcga	gactatgctc	tcggcccttc	ctcctgcccc	agaaccgaac	540
gacagcgctt	gctggagcgt	ggaggatctc	tggcccatac	agtcactaat	tagcggcatg	600
ggtgatgatg	cccaatacta	ttccgttttag	gccttaatta	gattatagat	catgacctga	660
tgaacaaaaac	aaaagcaatt	agaagaccca	aagggtcat	ttattgggtc	tttatgttga	720
agctagctag	gtagatcttg	tatgtataga	gaaaaggcca	cagcatatca	tatttctctat	780

gtgatgtgct	gtatacacta	ccatagcttt	gtgctaggta	tattagctag	cttgtagcag	840
tggcaacata	tctatcgaaa	taagaactta	gataatacag	cttttggtta	aaaaaaaaa	900
aaaaaaa						907

<210> 2078
 <211> 658
 <212> DNA
 <213> Eucalyptus grandis

<400> 2078						
gggagacgtc	tccagctcga	gtcgtcatct	gggtccgcgt	cttctcttcc	cttcttccaa	60
tggtttgatc	ctaggacaga	gagagaaaga	gagagatata	ccgaaagaga	ggtacagaga	120
gatagagggg	gagggagagg	gagactcgtg	gcgctgtttc	gagctttcta	gcttccggag	180
gaggagggct	ggtgttgagc	gaaacttgga	gaggtcatga	attcgacaac	cactcagttt	240
gtgtcctcta	gaaggatggg	gatgtatgac	ccgattcacc	aaattggaat	gtgggacgag	300
aacttcaagc	agaatggaaa	tcctaattgc	ccgccagctc	tgatcatacc	tatgcacgcg	360
aatttggaca	accagtcgga	ggatacttct	catggatcac	aggatactgc	tggcaagtat	420
gagcaagaaa	catcgaaacc	ttatgataag	gtgcaaagac	gtcttgccca	aaaccgtgag	480
gctgcgcgca	aaagccgtct	gcggaaaaag	gcttatgttc	agcagctaga	agcaagtcgt	540
ttgaagctta	tgcagttaga	acaagagggt	gaccgagcta	ggcaacaggg	tgtgtacatg	600
gcttcaggag	tagattcagc	ttatccagga	tatggtggat	gtttaaattc	aggaatcg	658

<210> 2079
 <211> 373
 <212> DNA
 <213> Eucalyptus grandis

<400> 2079						
gctcacttgg	gtcgcctctc	gttctctcgt	ttctcgcctc	cttcttcgaa	gcagcagcca	60
gcacagtgcg	gcaacgtgaa	gaagataaaa	agaagagtgt	ggctctgacg	ggaggggggc	120
gtctctctag	aaagactacg	ttttttcctt	tcgttaagaa	atgagacagg	ggctcttcta	180
gcttctgggt	cttgaggagg	agggccattt	tcttcttgcc	gattcgatag	gttggcagcc	240
cgggatgatg	gcggtgactt	cggcctgtaa	ggacaagatg	gggatcgaca	acgggaagta	300
tgtgcggtac	acgcccgagc	aggtcgaagc	tctcgagagg	ctgtatcacg	agtgcccgaa	360
gccgagttca	ctg					373

<210> 2080
 <211> 421
 <212> DNA
 <213> Pinus radiata

<400> 2080						
gttccagacc	ttttgcatct	tcattattct	tccgcctgtg	aaaagatggg	gagatctccg	60
tgctgtgaga	aggctcatac	taacaaaggg	gcctggacta	aacaagaaga	cgaccgcctt	120
atcgctcaca	ttcgagccca	cggcgaaagg	ggctggcggt	cgcttcccaa	ggccgcaggt	180
tgcttgctcg	cgctctgctt	tcttaactga	attaatggct	gcctgtaaat	tttccgttta	240
aatataatgt	ttcttgatgt	ccgatataac	gtttcttgat	tttccgatat	aatgtttcct	300
gattttccga	tataatgatt	ttcgattttc	cgtttatata	taatgtttct	tgattttccg	360
attgcagggc	tgctgagatg	cggcaagagc	tgcagactgc	gatggataaa	ctacctgcgt	420
c						421

<210> 2081
 <211> 746
 <212> DNA
 <213> Pinus radiata

<400> 2081						
gtttaattcg	acgacacctt	tgctgttag	aaaggcgcgg	gaggcttata	ggaagccaca	60
ccaaacaaaa	tcagaaataa	tgggtagggc	tccctgctgc	gaaaagggtt	ggctcaaaaa	120
gggcccctgg	acgcccgaag	aagatcagaa	actcgttact	tacatacagg	agcatggcca	180
tggcagctgg	agggtctctg	cgcagaaagc	tgggtgattat	gaatttatat	ttagttctag	240

aacttgcaag	aaattctctg	tatTTTTgtt	ttttgggtag	ttttcatggg	ttgagtttta	300
tgcagggttg	ctgagatgcg	ggaaaagctg	cagattgctg	tgggctaact	atctaaggcc	360
agatatcaag	cgggggaagt	tcaactgtgca	ggaagagcag	actattattc	aacttcatgc	420
actacttgga	aacaggtggt	ccgccattgc	tactcacctt	cccaagcgaa	ccgacaacga	480
aatcaaaaaa	tactggaata	cccacctgaa	gaagcgcttg	ctgcagatgg	gaatcgaccc	540
cgtgacgcac	aagcccaagt	ccgaatcgat	tatggtacct	ggtggttcagt	cgtccaatgg	600
gtcctcgaat	ctgagccata	tggcgagctg	ggagagcgcg	cgcttgggaag	ccgaatcgag	660
gctggcgcg	gagtccaagc	tcagggcaag	gggcctctgg	tctgcccagt	tgagaaacgt	720
taatgcgagc	tcgattttat	tcagcc				746

<210> 2082

<211> 244

<212> DNA

<213> Pinus radiata

<400> 2082

gaagatatca	agcaaatagt	tacacaccaa	gaaaatccac	aatgggtaga	tctccttgct	60
gcgcaaagga	agggtcaac	cgcggggcct	ggacgaaaac	ggaggatatt	attctctccg	120
aatacatteg	aattcatggc	gatggtgggt	ggagaagtct	ccccaaaaaa	gcagggtcta	180
agcgggtgtg	aaagagttgt	agattacgtt	ggttaaaacta	tcttcgtccc	gacattaaac	240
gcgg						244

<210> 2083

<211> 1151

<212> DNA

<213> Pinus radiata

<400> 2083

cttcaacagg	tttttgttct	gaaatcctgt	tatcacttcg	ctccatcttc	catttttgtt	60
ttctgacaac	cttttaaaca	tgggaagggc	gccttgctgc	tctaacgatg	acagaaacaa	120
aggagcctgg	accaaagaag	aggatgacag	gcttatccaa	tatattaagg	ttcatggaga	180
gggttgctgg	cgctctctcc	ccaaggccgc	aggtctgctt	cggtgtggca	aaagttgcag	240
actgagatgg	ataaattatc	ttcgccctga	tctcaaacga	gggtttttct	ccgaagacga	300
agatgatctt	attctcaaac	tgcacgccct	ccttggaat	aacaggtggt	ctttgatagc	360
tggccgtttg	ccaggacgaa	cagataacga	gataaagaac	tactggaact	cgcatctgaa	420
gcgaaaaactt	atcagcatgg	gaatagaccc	cctaaccat	cgctcttttc	aaaagacttc	480
tcaccatcat	ccctctcttc	cacagaatgt	tagagaggct	gaaacaacac	cttccattgg	540
gattgttcaa	gatttctttc	gttgcccgtc	tgaacttagc	accaaattccg	agcaaatttc	600
agatgctgca	agcggactcg	cgcaggatga	gcaacccac	ccgaacctga	acctgaacct	660
ggagctctca	atagctcgct	cctcagtcga	tcgagtagca	gagaaggagg	acgttggtta	720
ttcccagcaa	ggcgaagca	atctgagtga	gggaaagtga	tatttatgtc	attatggaga	780
ctgccctccc	cctccaatgc	aacaatgaga	tgatataaat	gtcccttttc	cgctcaccaa	840
agccctacgg	ggcaataacg	aatacatgaa	aaccgtttgg	ctcatagcaa	gtctagtttt	900
caacacttac	tattatttaa	ggaacgtaaa	aagtgtccag	ttcaattgat	gtattttgtg	960
acattttgct	ttgttagtca	cttacacatg	ctacaagttt	tggtggtcag	tcacctcaca	1020
cttttggtgt	gaaaaatggc	ttcaaggctt	cctttgtatg	gataccagtt	gcattggcaa	1080
tatgtaaaaa	tcgacatgt	aatgttttct	aatggcaag	tatatatttt	aaaaaaaaaa	1140
aaaaaaaaaa	a					1151

<210> 2084

<211> 372

<212> DNA

<213> Pinus radiata

<400> 2084

tttttgttct	gcaatcctgt	tatcacttcg	ctccatcttc	catttttgtt	ttctgacaac	60
cttttaaaca	tgggaagggc	gccttgctgc	tctaacgggtg	acagaaacaa	aggagcctgg	120
accaaagaag	aggatgacag	gcttatccaa	tatattaagg	ttcatggaga	gggttgctgg	180
cgctctctcc	ccaatgccgc	aggtctgctt	cggtgtggca	aaagttgcag	actgagatgg	240
ataaattatc	tttgccctga	tctcaaacga	gggtttttct	ccgaagacga	agatgatctt	300
attctcaaac	tgcacgccct	ccttggaat	aagtggctctt	tgatagctgg	ccgtttgcca	360

ggacgaacag at

372

<210> 2085

<211> 1285

<212> DNA

<213> Pinus radiata

<400> 2085

gggctgagag	aaaagtattt	tccttgggct	gaagagatca	ggctaattat	ggggcggaca	60
ccttggtgtg	aaaaaaatat	tgggctgaag	aaggggccat	ggacacctga	ggaggatcaa	120
aagctgatag	attacatata	aagccatggc	catggtagct	ggcgtgccct	tcctaaacga	180
gcagggctct	tgagatgtgg	aaaaagtggc	aggctgagat	ggaccaacta	tttaagacct	240
gatataaaac	gtggacagtt	ttcatttgag	gaagagcaga	ctataattga	actccatgct	300
gttcttggaa	acaagtggtc	tactatagct	gggcatctgc	ctgggaggac	tgacaatgaa	360
ataaaaaatt	actggaacac	ccatttgaag	aaacgccttc	ttcagatggg	aattgatcct	420
gtgacacaca	ggccaagaac	agacctcttg	gctttttcca	atatccaatc	ttcaattttt	480
aatacacctg	gttttggtca	tatggcccaa	tgggagagcg	ccagacttga	agcagaagct	540
cggctgacgg	gagagtattt	gagacaagcc	ttattcatgg	caggcaacgg	atcagccaca	600
gctgatctat	tgatgaggcc	gtgcaaatcc	gaatttggca	atgatcagtt	taatttgaca	660
aaaaatatgg	gcaaccaccc	atggatacag	cagcctggaa	tggccttaga	ctataagggg	720
gccgtacctc	agagtttgga	gcagttttta	cagacaaatg	tatgttctgc	atcagacatt	780
aatgggggtg	gttggttgag	ccatgaaggt	ggcttcaata	ttacgaagtt	tgcatctcca	840
tgttcaactc	tgatggaat	tcaaatcaaa	acagaacctc	agagtctgtg	tggtcctcaa	900
gtagtgaaaa	atgatatgca	gtttcttcat	agtgaaggag	atctacgaaa	acaagccatg	960
cttgatatga	atgtaggatg	taatgttctc	attaacatga	atgctgaatc	caaggtttca	1020
tttggtcaca	atggtattat	aactgaccaa	gaatacaata	atttgggtca	aatagataat	1080
aataaccatc	tttctcatgc	agctactaca	ctatggcctg	ttgaaggcca	gttgcaggcc	1140
atagccagtg	cctccatgcc	tggattgata	tcttccacca	gctgcacttc	aaacaacatt	1200
tacagccagc	ctggtttaat	tcctcttctc	aattccacaa	cctcttcaat	gggtgataca	1260
aattcttaca	gagaagcgca	gccag				1285

<210> 2086

<211> 1218

<212> DNA

<213> Pinus radiata

<400> 2086

cgcagatcgg	gactgcaaac	agaaccatag	ttctgcaaca	ttcaatggga	cggactcctt	60
gttgtctgaa	agtgggactc	aatcgagggtc	cctggacacc	cgaggaggat	ctttgcctct	120
caaattacat	cgaagctcac	ggagaaggcg	ggtggagaac	acttccaaag	aaagcaggtc	180
tgctccgagt	cgggaagagt	tgcagattgc	gttggatgaa	ttatctccga	cccgatgtga	240
aacacgggca	catattaccc	gaggagggaag	atttaatact	caggttgcat	cgtcttcttg	300
gaaacagggtg	gtctttgatc	gctggacgta	tgcccggcag	aacggataat	gaggtcaaga	360
actattggaa	taccacctc	agcaaaaagc	ttatcagtca	gggtatcgac	ccgcggacgc	420
acaaaccgtt	gtcagaatcc	gaagacatat	gttcgagtc	cgggaatagc	gaagtgaacc	480
gcaagtctca	acgggaaaat	aacgctgaaa	taccaagaaa	agttgccgat	ggcgagttg	540
atattcaaga	taagggaagag	gatatacacag	aagatcagac	atctgctcaa	ttgcctgaga	600
atcagcttct	tgaacaagc	aattctcaat	gcccgtctgt	cgctactgat	ttcgtgcctc	660
aggctccctc	gataccttcc	acggcttatt	catttcaaca	gagcacaact	tcaagtgttc	720
ccggaggcgt	gtcggattca	gttgatgtta	atcataataa	gggaagtaag	caagttcctt	780
ttcctctctc	aaatactgca	tgttttaata	gttcggcaca	aggggtagct	ggtgactatc	840
tcgaccaata	tttgatgaag	aatcttggtta	ctaacagcaa	tgatctgata	acatccactg	900
tgagattaag	ctccgcttta	caaactgcac	cttttggtgg	acaattcgat	tcaaatcatg	960
tttttatgtc	aggcaatgca	tcgctcaatg	aaaaacatca	gatgcctcag	aactcacaag	1020
ctttggaaat	ggatccccac	cattctttca	tagcgcattc	ttctgaggag	ggcacctatg	1080
ataaattgaa	ccatacaagg	tgtgcagctt	ctgatcaggt	cacatcattc	aattatccat	1140
atcttatttc	tcataaccgtt	acggggtcag	cccttgggga	ttttaatccg	gatatctttc	1200
ctccttttgt	ggaatctt					1218

<210> 2087

<211> 473

<212> DNA

<213> Pinus radiata

<400> 2087

gaccttttgc	atctttcatta	ttctttccgcc	tgtgaaaaga	tggggagatc	tccgtgctgt	60
gagaaggctc	atactaacia	aggggcctgg	actaaacaag	aagacgaccg	ccttatcgct	120
cacattcgag	cccacggcga	agggggctgg	cgttcgcttc	ccaaggccgc	agggtgctg	180
agatgcgcca	agagctgcag	actgcatggg	ataaactacc	tgcgtcccga	tctgaagcgt	240
ggaagcttca	ccgaagaaga	agacgagctc	atcatcaaac	tccactcctt	cgttggcaac	300
aagtggctct	taattgcagg	gagattgccc	ggacggacgg	acaacgagat	aaagaactac	360
tggaacacac	acatcaaaaag	aaaattgctg	agcaaggagc	tcgaccccca	aacccatcgt	420
ccactcggcc	agccaaacia	tacccccgctc	actcggcctg	ttctcgagca	cga	473

<210> 2088

<211> 1150

<212> DNA

<213> Pinus radiata

<400> 2088

aaacttgctc	acggattccg	acccttccgg	ctaaagctgc	tgcatttctg	tgtgtattga	60
agatggggag	atctccctgc	tgtgaaaaag	ctcatacaaa	caaaggggcg	tggaacaaaag	120
aagaggacga	tcgcctcatc	gcccacattc	gaactcacgg	cgaagggttg	tggegtctcg	180
ttcccaaggc	cgcagggtcg	atgcgctgcg	ggaagagctg	caggctccga	tgataaaact	240
acctgcgtcc	tgatctgaag	cgtggaaaact	tctcagaaga	agaagacgaa	ctcgatcatca	300
aactccactc	cctactcggc	aacaagtggg	ctcttattgc	aggcagattg	cccggggcga	360
cggacaacga	gataaagaac	tactggaata	ctcacatcaa	gagaaaattg	ctaaacagggg	420
gactcgaccc	ccagtcctcat	cgccccctcg	gccagccgca	caacagcaac	acgacctgcc	480
cctctctgcc	cgccctcgag	cacgaaaattc	ttgtgttcca	gaggccaaga	acgccggaga	540
tagcagattt	ctttcaatac	gagcgctctg	aaagctcgcc	gatggaaccg	gccacttcta	600
aagacgcgga	agagcatccc	gacctcaatc	ttgatttctg	tatcagcttg	ccagttcatt	660
cgccccccgc	cacgagcaga	gcttcgagcg	tcgatggaac	cgtggattca	aaaccttaatt	720
cggtttcttg	tcacatgggg	ttgcaagtaa	attatgggtg	gcaatgtgag	aacagatatt	780
gtgaagagag	tgcttccggt	gtctcgagtt	tttacacgct	cgctttatag	aagatttgag	840
ctttatgggt	tgcttattaa	caccactaag	cattcatctg	atgaataggc	agagtgaac	900
tatatgtttg	ctcattgtgg	cagcccggag	tttgagttta	atagacaggg	acgcagctgg	960
acagcagtta	cccaaattat	tgtttaaaga	gtgtagatag	ctcacctatg	aacataggaa	1020
tcgctgtttc	accatggcgc	tctgtaatat	ttaaagcgat	tcatatggaa	gcttgagcgc	1080
gaagtctcca	gtgccgtatc	atcaactaat	gtaattgaac	tgcaattggg	cacaaaaaaa	1140
aaaaaaaaaa						1150

<210> 2089

<211> 723

<212> DNA

<213> Pinus radiata

<400> 2089

gtttgtcttc	cccttcattc	gcaattgctt	gcttgggtgtg	ctgagagggg	aggaggacga	60
ggaggaggaa	acagagcaac	aagcagcccg	acagacacac	atctcaacag	gtggatcttt	120
ctcgcccgcc	attctatcag	gtgtattatt	gtgcaacata	tagctgaaat	atggtttggg	180
ggatcttgta	gtaggagcat	acgatcaatt	ttaggaacca	aggctcattt	taactatggg	240
tacaggagag	atggggacac	cagcgaaaac	aactaaggca	tccacaccac	aggaacagcc	300
tccaacaagc	actgccatgc	tttatcctga	ctgggctgca	gcattccagg	cttattataa	360
ctctggaacc	acaccaccac	ctcctcctgc	gtactttcat	tcaagcgttg	catctagtcc	420
acagcctcat	ccatatatgt	ggggggggca	gcctcctaag	cctccatatt	gaactcttcc	480
tcccccatat	gcggcaatgt	atcatcatgg	cagcatgtat	gctcatccat	ccatgcctcc	540
gggtgcacat	ccatttgctc	cttatgtgat	gacatcgctg	ttaagtacaa	ctgaagggtgc	600
acctgtaggc	acaacttctg	gtgcagatgc	agaaggaaaag	ccatctgaac	caaaggacca	660
aactctattg	aagagggtcca	aaggaagctt	aggcagctct	aatatgctta	ctggcaagat	720
tac						723

<210> 2090

<211> 768
 <212> DNA
 <213> Pinus radiata

<400> 2090
 gtttgactga aggttttagag ttcgattccc acaggtaaca gaggccacga aggtttcaag 60
 ttcgattccc acaggtcaca gaggccacga aggtttcaag ttcgattccc acagttcaca 120
 gagccaacga aggtttcaag ttcgattcca ctaggtccag gaggagcaaa gaagatcggt 180
 gggctcaatg gggtgcaacc agtcgaaagt cgagagcgag gaagaggtgg tgaagtcaaa 240
 ggagaggaaa caatttatga aggagtcagt ggcggcccg aatgctttcg ccgccgctca 300
 ttcggcgctcc ataacgtcgc tcaagaacat tggggcccg ttgaacgact acgggcaggg 360
 cgagtcaaaag gaatccctga gccaggggca tctccccgtc cccacatat atggcgatcc 420
 actgctctccc gcgctcccc tgctccgct actccctcct ccgcgcccag atgagcacc 480
 cgctcgcccc ctggagcgct ctgccagtgc accggccatc gccttacagc aacaggcgga 540
 ggaagacaga aaccctgaag caaatgctgg tgcttccatt ccagaaggag aagaagacga 600
 agtagaggag gaggaggacg agcatctggt ggaggtgtct cactcggtta cttcttttaa 660
 tccacctccg cgtccgctc cttcatccag cgaaccccca ccgctccgc tgctccgct 720
 gacgaatcag tgggacttct ttgacgacaa cagctacttc gagcgga 768

<210> 2091
 <211> 479
 <212> DNA
 <213> Pinus radiata

<400> 2091
 aaaattttaac agaaacattg caagctgctt gtttaatttc tgtgcttcaa gggaaaggag 60
 aggaagagat tcccagagga gaagatcaag ataaatgggg agggggaaga ttgaaataaa 120
 aatgattgag aacgcaacaa acaggcaagt caccttctct aagagaagag ggggacttaa 180
 aaagaaagct caggagctct ccgtcttatg caatgcagaa gttgctctca tcattttttc 240
 cagcaccggc aaactccatg agtgggtcaag ctcgagctca ttctttatgt taaaaaaaag 300
 catgaagaaa attctcgaga gataccagaa atcagagcag ggactaggac tcatggatta 360
 tcaacatcaa cagctgttgt gtgaaatgag acgaatcacc aaagaaaatg aaagccttca 420
 agagcgttta aggcataatga atggcgagga agtcaattca ttgaagctcc cagagcttt 479

<210> 2092
 <211> 557
 <212> DNA
 <213> Pinus radiata

<400> 2092
 gaaagaagga aagaatgggg cgagggcgcg tcgagctgaa gcggatcgag aataagatta 60
 accgtcaggt caggttttcg aaacgcggga atggtctgct gaaaaaggcg tatgaacttt 120
 cagtgttatg tgatgcagag gtagcactga taatattctc aagcagagga aaactctatg 180
 agttcggaag cgccgggatg ctcaagactc tggagcgata tcaaaaatgt tcatatcgat 240
 tgcaagacgc gactgtatcg gaccgggagg cgagaattg gcatcaagag gttggcaaat 300
 taaaagccag agttgaactt ttacaacgat cacaaggca cttattaggt gaagacctgg 360
 gcccttgag tattaaggag ctgcaacaac tggaaactca acttgaggtt gcaactgacac 420
 atgttaggtc aagaaagact caagtcatgt tggaaatgat ggatgaacta cgcagaaagg 480
 agcgaatttt acaagaagta aacaaatctc tgcgcaagaa gttgcaggag gccgagggac 540
 aggcattcaa tgccatg 557

<210> 2093
 <211> 356
 <212> DNA
 <213> Pinus radiata

<400> 2093
 agtattgaaa ttcccctggt ttgatctgat agctatggat ctgatggagt cttttgaggc 60
 aaaggggaag ggagagaaga ggagaacggt gaggggaaaa acccagttga agaggattga 120
 gaacgggacc agcaggcagg ttactttttg taagcgcagg aacgggtctgc tgaagaaagc 180
 ttacgagctc tcggtgcttt gtgatgccga agtggcactt attgttttct ctccaaggag 240

gaagcgctat	gagttcgcta	atcccagcat	gcagaaaatg	ttggcacggt	acgaaaattt	300
ttcagaagga	agtaaagcaa	cgagtacagc	aaaagagcaa	gatgtccagg	gtttaa	356

<210> 2094
 <211> 404
 <212> DNA
 <213> Pinus radiata

<400> 2094						
gggcaagggg	aaagacacag	atgagaaaaga	tcgagagcgc	gaccagcagg	caggttacgt	60
tttctaagcg	cagaaatgga	ttgatgaaga	aagcttacga	gctgtcgggtg	ctctgcgatg	120
cccaactggg	actgattgtt	ttctcccca	gaggggaagg	ctatgaattc	tccagtacct	180
gcatgcagaa	aatgttggca	cgatacgaaa	aatgttcaga	aggaagtgc	acgagtacat	240
caaagagca	agatgtccag	tgtttaaac	gagaaagtgc	gaatatggaa	gaaaggattg	300
aaattcttga	atccatgcaa	agaaagatgt	tgggcgagga	gctggcatca	tgtgcattga	360
aggatttgaa	tcagttggag	agccaggttg	aacgaggttt	gaga		404

<210> 2095
 <211> 584
 <212> DNA
 <213> Pinus radiata

<400> 2095						
tcgcagcgta	aagcgttcat	gggtgccggg	cggttaactc	ttgaaaaata	ttagattcga	60
ctccctgacc	ctgggaggag	gaagaagaag	aagaacagca	ggaggaagcg	aaaatttctt	120
aatagtaacc	agagaatagc	agcgggtgaa	gaagcagagg	gatcttgcaa	tggggcgggg	180
tcgggttcag	ctgagggcga	tagaaaacaa	aataaatcga	caagtacagt	tttcgaagcg	240
ccggaacgga	ctgctgaaga	aggcgtacga	gctatcagtg	ctgtgcgatg	ccgaagtggc	300
gctaataatt	ttctctacca	gaggaaagct	ttacgagttt	gccagttcca	gcatgaacaa	360
gacgttggaa	agatacgaaa	aatgttcata	tgcaatgcaa	gataccacag	gcgtttcgga	420
ccgggaagca	cagaattggc	accaagaagt	tacaaagtgt	aagggttaagg	ttgagctcct	480
gcagcgatca	caaaggcatt	tggtggggga	agatctgggt	ccgttaaatg	ttaaggagct	540
acagcagctt	gaacgtcagc	tggaggttgc	tctgacacat	ctta		584

<210> 2096
 <211> 453
 <212> DNA
 <213> Pinus radiata

<400> 2096						
ctcttgtctg	ttctcgaaat	cggccaaaat	gggaaagaag	aggggtggagc	tgaaacgcat	60
tcaaaaccct	agcagtcgac	atgctacttt	ctctaaacgc	aagaatggat	tgctaaaaaa	120
ggcggttcgag	ctttctgtcc	tctgtgatgc	tgaagtcgct	ctcatcattt	tctctgaaac	180
tggcaagatt	tacgaatttg	cgagcaataa	cgatatggca	gcaattctgg	gaaaataaccg	240
agtacacgaa	gaaggcactg	aaacgtccag	tccaacatcg	cttcaaaacg	taaagtatca	300
tgaatcaggg	cttgagaaat	tgcaagagaa	gttgaccgct	ttgcaaaaga	aggaaaagaa	360
cttgattggg	gaagacttgg	aggtattaac	aatgaaagaa	ctgcaacggc	ttgaaaaaca	420
gttacaaaatt	ggcataaaaa	ggttagtgat	aga			453

<210> 2097
 <211> 509
 <212> DNA
 <213> Pinus radiata

<400> 2097						
gcaaccggag	ctttaagact	agaatatata	tgtagccctc	gggctctgac	gaatactgaa	60
actagagata	cccacctctt	atctggtgtg	taaggcacgc	aaaatgggaa	agaagaaggt	120
ggaggtgaaa	ctcattcaaa	accctaccag	tcgccaagga	tgtttctaca	accgcaagtg	180
cggtttgctt	aaaaaagcgt	ttgagctttc	tggtctctgt	gatgctgaag	ttgcccttat	240
aatcttctcc	caaaccggca	agatttacga	gtttgcaagc	catgacgacg	tcaacgcaat	300
tctcgcaaaa	taccggatac	aaacgggaac	aacaacaaac	gcgatgcctt	cctcgccttca	360

aaacaccgag	ccggagacgt	tgcatgagga	gacaaatatg	ttgggaaaaa	ggaaaaaagt	420
ggagaagttg	catgagaaga	tcaatatgtt	ggaaaaaaga	ggaaaaaaca	tggttggtga	480
aaatttgagg	tcattaacgg	tcaatgaat				509

<210> 2098

<211> 430

<212> DNA

<213> Pinus radiata

<400> 2098

gtttgttgcg	gttctccggt	ccgcgggtct	gattgattaa	ttaaagagca	agagtgcga	60
aaggagtctg	gagaatggca	agaggaaaga	cccagatgaa	gaagattgag	aacgtgacca	120
gcagacaggt	cacgttttct	aagcgaagaa	atgggttgct	gaagaaggct	ttcgagctct	180
cgggtgctgtg	cgatgcagaa	gtgggactta	ttgtattctc	cccaagtggg	aagctctatg	240
aattttcgcg	tccctgtatg	ggaaaattgt	tggagaagta	tgaaaagaat	tcacgagaaa	300
gtggtataaa	taatgcggct	aaagagaaaag	atactcagca	ttcaaacgc	gaaattgcaa	360
atatggaaga	gaaaattagg	atcctcgaat	caacagaaaag	aaagatggtg	gggcaaaatc	420
tagcatcatg						430

<210> 2099

<211> 513

<212> DNA

<213> Pinus radiata

<400> 2099

tttcaatgcc	cctctttttc	cagtggacga	gtgttcaatt	ttccctgtgt	tgatctgata	60
cctataaatc	tgatggattc	ttttgaggca	aagggaaaag	gagagaagag	gagaacgggtg	120
aggggaaaaa	cccagatgaa	gaggattgag	aacgcgacca	gcaggcaggt	tactttttct	180
aaacgtagga	acgggtctcct	gaagaaaagct	tacgagctct	cgggtgctttg	tgatgccgaa	240
gtggcactta	tggtttttctc	cccaagaggg	aagctctatg	agttcgccaa	tcccagcatg	300
cagaaaaatgt	tggaacgata	cgagaagtgt	tcggaaggaa	gtaaaacaac	aagtatagca	360
aaagaggaag	atcccaaggc	tttaaaacga	gaaattgcga	atatggaaga	aaggattgag	420
attcttgaac	gcacgcaaaag	aaagatggtg	ggcgaggaac	tggtcatcatg	tgcatggaag	480
gatttaaatc	agttggagag	ccagggtgaa	cga			513

<210> 2100

<211> 526

<212> DNA

<213> Pinus radiata

<400> 2100

ggattcttgt	atTTTTgtgt	gttgctgctg	caacagttct	taaataccaa	gacattgatg	60
agagcttgag	taatatTTTct	gcaaaaaccc	aagtaaacc	tgaagctagt	ccaaactagt	120
ggaaggaaac	tcggctattc	tgtaagttca	ctcagatTTT	gagaaactct	tgggattttg	180
ctcaaaatgg	ggcgtggtaa	aatagagatc	aagaagatcg	agaacagcgt	gcacaggcag	240
gtgaccttct	gcaagcgccg	aggcggtctg	atgaagaaag	cctacgagct	ttcagtgtctg	300
tgcgatgcag	atgtagcgct	cattgttttc	tcgagccgag	gaaagttgta	cgagctgggc	360
accagcaaca	acaacaacaa	cagtatgagg	tcaatattgg	aaagatatca	aaagtgttca	420
cagacggcaa	aacatatgaa	cttttcgaat	aatacttcag	acgagaaaat	gaagcaagaa	480
ataaattttac	ttaaacaaca	aattggatca	gctaaactta	ctaaca		526

<210> 2101

<211> 295

<212> DNA

<213> Pinus radiata

<400> 2101

cctcttggaa	ggcaaatcct	tgtactgttc	catcctcacg	aattggaggt	tttggaggtg	60
gccaggtcat	cctcccatTA	gccatactg	tggaacatga	agagtttttg	gaggttatca	120
agttggagaa	tcatggcctg	acacaggaag	aagctttgct	atcgagggat	atgtttctgt	180
tgtagctttg	tagtgggctc	gatgaaaatg	cagttggggc	ctgtgctgaa	cttgtctttg	240

ctccaattga tgcattcetta gctgacagtt ctcttttgcct cccttctggt ttcag 295

<210> 2102
<211> 296
<212> DNA
<213> Pinus radiata

<400> 2102
ggagaatcat ggcctgacac aggaagaagc tttgctatcg agggatatgt ttctgttgca 60
ggtatcgat cgacgtgttt ctattgctta gcagagaaac ttgaagtgt aaattttaat 120
ttttactaat tcatttgaat tgatgatctt gccattttga ttggacagct ttgtagtggg 180
ctcgatgaaa atgcagttgg ggctgtgct gaacttgtct ttgctccaat tgatgcatcc 240
ttagctgaca gttctccttt gctcccttct ggtttcagag tcattccttt agactc 296

<210> 2103
<211> 475
<212> DNA
<213> Pinus radiata

<400> 2103
gaagtgtgga tgttcttact gctttctcaa ctggaaatgg aggaacaatt gagctttttat 60
acatgcagat gtagcgcca actacttttag ctctgcccc agatttctgg actcttagat 120
acatttctgt attggaagat ggtagtcttg tggtttgcga gagatccttg agtggaaactc 180
agggaggtcc cagcatgccc gcggtgcagc agtttgttag agcagaaatg caaccagtg 240
gatatttgat tggccatgc gaaggtggag gttctctaatt tcatattgtt gaccatattg 300
atgtggagcc atggagtgtt cctgaagtgc tacgtccact gtatgaatca tccactgtac 360
ttgccccaaa gggtacaatg tcggccttac gccatttgcg tcaaatagca caagaggcat 420
cttctgatgt ggtccttggc tggggaagac aaccgcgtgc attacggaca ttttag 475

<210> 2104
<211> 1612
<212> DNA
<213> Eucalyptus grandis

<400> 2104
cccatctccc ttcaaaaaac gacgcggcg acgacgacga ccccccacca ccaccaccac 60
catcgacgac tcggcacagc acgcgaacca gtcgcggaag gtctcgagaag gaattcgacg 120
ctcgggaatc ggccgggaga agaggaggaa gacgacgaat cggagcctta tgggtgtccgt 180
gaacccgaac ccggcgcaag ggttttactt ctctgatccc gcgaacacga ggatccacgg 240
tgtcaacgac ggctcggcgg ccgagggcgg cggcgccgag cgcgcgtacg cggaggaccc 300
gagcaagaag gtgcggaagc cgtacacctt caccaagtcc agggagagct ggaccgagca 360
ggagcacgac aagttcctgg aggcgcttca cctgtttgat cgtgattgga agaagattga 420
agcttttgtt ggatcaaaaa cagttattca gattcgtagc catgcacaaa agtactttct 480
aaagggttcag aagaatggga caagtgaaca tgtaccacca ccacggccaa aaaggaaagc 540
tgcccatcca taccacaga aagcacctaa agctccagtt gtttcccaag tcaatgggac 600
atttcaagtt tcatctgctt ttttggaaac cgggcataat gtcagacctg atggatcagc 660
attgcttggg aattcccgta caagtgtagc cttgtcttca tggagtcata actctgtacc 720
cgcaatgagt gcatcacagg ggacaaaaga tgtaggaatt tctggccac cagttccaag 780
taattgttgc aacagcagta gtaatgacag tacaccgagg tcctggccaa atgctcaagc 840
aattgaacct ttggatcaac agaaacatct tagagttatg ccagatttcg cgcaagtata 900
taggttcatt ggcagcgttt ttgacccgga tgctggtggt catctacaga gattgaagca 960
gatggacct ataaatttgg aaacggtagt gctcttgatg aaaaatctca gcgcaaattt 1020
gacagcccc gaattcgaga aatatcagca cggcttgttt gcttcatatg aggggtggtcc 1080
tgagaagtcc aaatctggcg gttccttcaa gttgctcccc gaaaaatctg gaagcctaatt 1140
tctgtctgag taacttgtga ctttaacaaa ctcgacctct tcgagtcggg catcgctggg 1200
gaaaactgca ctgtctttga agatcaagat tagtagtgga gaataaagat gccaaaggatc 1260
gccaaagctgt ggggatcgca aaactggtcc gtaactgagg tctgggcttg tggtttttgt 1320
aggtctgtaa atatcctgtg aaatgggaac acggcagttt gtgcgaacaa tgctgagaga 1380
catcatcgga agtttaggct ttgtataggt tcttatcgga ctttgtatat ggctgagaga 1440
tacagagatg tcgtgcgacc tagaataaag cttaggcgtc gggctctgtt tgtttatgta 1500
tatgtgcgag tgtaagatcg aagaagagga agtagcgagg aacgtttgat caggttgtgg 1560

tttttggtag actatatattgc attggctgct ttctctcaaa aaaaaaaaaa aa 1612

<210> 2105
 <211> 1576
 <212> DNA
 <213> Pinus radiata

<400> 2105
 gacctttttgc atctttcatta ttcttccgcc tgtgaaaaga tgggggagatc tccgtgctgt 60
 gagaagggtc atactaacaag agggggcctgg actaaacaag aagacgaccg ccttatcgct 120
 cacattcgag cccacggcga agggggctgg cgttcgcttc ccaaggccgc agggctgctg 180
 agatcgggca agagctgcag actgcgatgg ataaactacc tgcgtcccga tctgaagcgt 240
 ggaagcttca ccgaagaaga agacgagctc atcatcaaac tccactcctt cgttggcaac 300
 aagtggctct taattgcagg gagattgccc ggacggacgg acaacgagat aaagaactac 360
 tggaaacacac acatcaaaaag aaaattgctg agcaagggac tgcaccccca aacccatcgt 420
 cactcgggcc agccaaacaa taccctcgct actcggcctg ttctcgagca cgaattccg 480
 gcattccaga accctgcaac gccggagata gcagacttgt tacagcacca ccgattggaa 540
 agctcgcta tcaaaccggc agcttcggat gcggaagagc atcccgacct caatctgaat 600
 ttgtgtatca gtttgccgtc taattcggcc ccggccgtaa acagagtatc gagcgtcgat 660
 acaacagtag attcaaattc taattctggc gacgggctgt gctggcagtt tctctgacgg 720
 aggtcgtttc aataagaggg tgtgcattat cgcagcacga ccacgcttat gaccagtgcc 780
 aaaggcaca ggaactcgtgg tggaaagatg tttatagtgc aaagatctcc gacttgctta 840
 tcgtggaatt gaaataatgt gttggagggc gcagagacgg tgggaaaaag gttttgtgtg 900
 ttgcaggtct ggagatatgg tggggaagtg tatggataat aggtatttct ataatttgca 960
 attctggtgc aattattcac aacagttagc atttatcaag gaaaaatata cttcgttttg 1020
 tgttctcagt cgtaggagat ataccagtac cagtacatta tctgcttgca gggtaagttg 1080
 aagttcatta cattgcaatg ccggtgcctt atcgccctca tggccgtatt tttaaagaca 1140
 aatcccacgc tgettcagcc tgcaacaaga tatctttact ctcattacac tgatacatatc 1200
 cactgggtcaa aacttcccat cactgtcata ggctggaaca gagaaactga agcctgttca 1260
 aaattttcaa tacttttaga tctggtaaag aagccaatgt gagaactgca aatttcattg 1320
 gggcaaaact caggtgtact gtcaaagcat gaaagtccag aatttgatgg tgggatattc 1380
 aacatacggc agaggtaccc ccaatgatgt agaaagtatt gggctgggtg cctattacca 1440
 cttgcagtgg tgtaggaaaa agtgtagttc tattgcagga gtgtaataaa tgaggtagat 1500
 atttttctcc ccgattgatg ttcaatatag actcagcgac gttttatgtg tgttgaaaaa 1560
 aaaaaaaaaa aaaaaa 1576

<210> 2106
 <211> 210
 <212> DNA
 <213> Pinus radiata

<400> 2106
 ctatgctatt acagaatgtg cctccagcac tacttgtccg cttcttgccg gaacatcgct 60
 cagagtgggc tgattgtaac attgatgctt attcttcagc taccatgaaa gcaaattgctt 120
 acaatgttcc aggttccactg ggaggcatta cagggagtc aagttatcctt ccactggcac 180
 atactgtgga acatgaagag ttcttggaag 210

<210> 2107
 <211> 27
 <212> PRT
 <213> Pinus radiata

<400> 2107
 Met Lys His His Val Val His Asn Cys Cys Ser Lys Lys Ala Val Lys
 1 5 10 15
 Arg Gly Phe Trp Ser Pro Glu Glu Asp Leu Lys
 20 25

<210> 2108
 <211> 126
 <212> PRT

<213> Eucalyptus grandis

<400> 2108

Gly Ile Ser Arg Asn Phe Val Lys Thr Arg Thr Pro Thr Gln Val Ala
 1 5 10 15
 Ser His Ala Gln Lys Tyr Phe Leu Arg Arg Thr Asn Gln Asn Arg Arg
 20 25 30
 Arg Arg Arg Ser Ser Leu Phe Asp Ile Thr Thr Asp Ser Tyr Phe Gly
 35 40 45
 Val Ser Ser Ser Thr Met Glu Gly His His Gln Ala His Gln Val
 50 55 60
 Pro Ser Phe Pro Leu Ser Leu Pro Pro Ala Val Ser Pro Gly Thr Gly
 65 70 75 80
 Glu Lys Leu Leu Glu Ser Leu Arg Leu Arg Lys Glu Gly Cys Gln Ser
 85 90 95
 Lys Pro Thr Pro Ser Lys Pro Ile Arg Pro Val Pro Ile Leu Pro Ile
 100 105 110
 Pro Pro Ser Ser Lys Met Ala Ala Leu Asp Leu Asn Lys Ala
 115 120 125

<210> 2109

<211> 130

<212> PRT

<213> Eucalyptus grandis

<400> 2109

Met Pro Gly Phe Thr Arg Ala Arg Lys Met Ser Met Ser Gly Glu Glu
 1 5 10 15
 Glu Gly Asp Leu Arg Arg Gly Pro Trp Thr Arg Glu Glu Asp Asn Leu
 20 25 30
 Leu Ile His Ser Ile Thr Cys His Gly Glu Gly Arg Trp Asn Met Leu
 35 40 45
 Ala Lys Ser Ala Gly Leu Lys Arg Thr Gly Lys Ser Cys Arg Leu Arg
 50 55 60
 Trp Leu Asn Tyr Leu Arg Pro Asp Ile Lys Arg Gly Asn Leu Thr Pro
 65 70 75 80
 Gln Glu Gln Leu Met Ile Leu Glu Leu His His Lys Trp Gly Asn Arg
 85 90 95
 Trp Ser Lys Ile Ala Gln Tyr Leu Pro Gly Arg Thr Asp Asn Glu Ile
 100 105 110
 Lys Asn Tyr Trp Arg Thr Arg Val Gln Lys Gln Ala Arg Gln Leu Asn
 115 120 125
 Ile Glu
 130

<210> 2110

<211> 146

<212> PRT

<213> Eucalyptus grandis

<400> 2110

Cys Cys Asp Lys Val Gly Leu Lys Lys Gly Pro Trp Thr Pro Glu Glu
 1 5 10 15
 Asp Gln Lys Leu Leu Ala Tyr Ile Glu Glu Asn Gly His Gly Ser Trp
 20 25 30
 Arg Ala Leu Pro Ser Lys Ala Gly Leu Gln Arg Cys Gly Lys Ser Cys
 35 40 45
 Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp Ile Lys Arg Gly Lys
 50 55 60
 Phe Ser Leu Gln Glu Glu Gln Thr Ile Ile Gln Leu His Ala Leu Leu
 65 70 75 80

[illegible]

```
<210> 2111
<211> 99
<212> PRT
<213> Eucalyptus grandis
```

[illegible]

```
<210> 2112
<211> 59
<212> PRT
<213> Eucalyptus grandis
```

	<400> 2112														
Met	Gly	Arg	Gly	Arg	Leu	Gln	Leu	Lys	Arg	Ile	Glu	Asn	Lys	Ile	Asn
1				5					10					15	
Arg	Gln	Val	Thr	Phe	Ser	Lys	Arg	Arg	Ala	Gly	Leu	Leu	Lys	Lys	Ala
			20					25					30		
His	Glu	Ile	Ser	Val	Leu	Cys	Asp	Ala	Glu	Val	Ala	Leu	Ile	Ile	Phe
		35					40					45			
Ser	Ala	Lys	Gly	Lys	Leu	Phe	Glu	Tyr	Ser	Thr					
	50					55									

```
<210> 2113
<211> 79
<212> PRT
<213> Eucalyptus grandis
```

<div style="display: flex; justify-content: space-between; padding: 0 10px;"> <400> 2113 </div>															
Val	Lys	His	Asp	Val	Glu	Thr	Leu	Ser	Ser	Lys	Val	Lys	Met	Ala	Glu
1				5					10					15	
Glu	Thr	Val	Lys	Arg	Val	Thr	Gly	Leu	Asn	Pro	Met	Leu	His	Val	Met
			20					25					30		
Ser	Asp	Met	Ser	Ser	Val	Gly	Val	Pro	Pro	Phe	Asp	Gly	Ser	Pro	Ser
		35				40						45			
Asp	Thr	Ser	Ala	Asp	Ala	Ala	Val	Pro	Val	Arg	Asp	Pro	Lys	His	Gln
	50					55					60				

Phe Tyr Gln Thr Asn Ser Ser Asn Pro Ala Ser Ser Ala Asp Asp
65 70 75

<210> 2114
<211> 104
<212> PRT
<213> Eucalyptus grandis

<400> 2114
Gln Val Ala Gln Leu Arg Val Glu Asn Ser Thr Leu Leu Lys Arg Leu
1 5 10 15
Ser Asp Ile Ser Gln Lys Tyr Asn Val Ala Ala Val Asp Asn Arg Val
20 25 30
Leu Glu Ala Asp Val Glu Thr Leu Arg Ala Glu Val Lys Met Ala Glu
35 40 45
Glu Thr Val Lys Arg Val Thr Gly Leu Asn Pro Met Leu His Val Met
50 55 60
Ser Asp Met Ser Ser Val Gly Val Pro Pro Phe Asp Gly Ser Pro Ser
65 70 75 80
Asp Thr Ser Ala Asp Ala Ala Val Pro Val Arg Asp Asp Pro Lys His
85 90 95
Gln Phe Tyr Gln Thr Asn Ser Met
100

<210> 2115
<211> 71
<212> PRT
<213> Eucalyptus grandis

<400> 2115
Met Gly Arg His Ser Cys Cys Tyr Lys Gln Lys Leu Arg Lys Gly Leu
1 5 10 15
Trp Ser Pro Glu Glu Asp Glu Lys Leu Leu Arg Tyr Ile Thr Gln Tyr
20 25 30
Gly His Gly Cys Trp Ser Ser Val Pro Lys Leu Ala Gly Leu Gln Arg
35 40 45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
50 55 60
Leu Lys Arg Gly Thr Phe Ser
65 70

<210> 2116
<211> 55
<212> PRT
<213> Eucalyptus grandis

<400> 2116
Glu Leu Gln His Leu Glu Gln Gln Leu Ser Gly Ala Leu Ser Ser Val
1 5 10 15
Lys Glu Lys Lys Glu Gln Trp Leu Leu Glu Gln Leu Glu Arg Ser Arg
20 25 30
Leu Gln Glu Gln Arg Ala Met Leu Glu Asn Glu Thr Leu Arg Arg Gln
35 40 45
Val Asp Glu Leu Arg Gly Phe
50 55

<210> 2117
<211> 62
<212> PRT
<213> Eucalyptus grandis

<400> 2117
 Glu Ile Ser Val Leu Cys Asp Ala Asp Val Ala Leu Ile Val Phe Ser
 1 5 10 15
 Thr Lys Gly Lys Leu Phe Glu Tyr Ala Thr Asp Cys Cys Met Glu Arg
 20 25 30
 Ile Leu Glu Arg Tyr Glu Arg Tyr Ser Tyr Ala Glu Ser Gln Val Leu
 35 40 45
 Thr Asn Asn Ala Glu Thr Asn Gly Asn Trp Thr Leu Glu His
 50 55 60

<210> 2118
 <211> 49
 <212> PRT
 <213> Eucalyptus grandis

<400> 2118
 Leu Phe Pro Pro Gln Ser Glu Gly Phe Phe Asn Pro Met Asp Gly Asn
 1 5 10 15
 Leu Ser Leu Gln Ile Gly Tyr Asn Pro Thr Cys Leu Asp Glu Met Asn
 20 25 30
 Ala Ser Val Ser Ser Gln Asn Val Ala Gly Phe Ile Pro Gly Trp Met
 35 40 45
 Leu

<210> 12119
 <211> 195
 <212> PRT
 <213> Eucalyptus grandis

<400> 2119
 Ser Gly Ser Gln Val Ser Ile Ile Met Ile Ser Ser Thr Gly Lys Leu
 1 5 10 15
 His Glu Tyr Ile Ser Pro Ser Thr Ser Thr Lys Lys Met Tyr Asp Gln
 20 25 30
 Tyr Gln Gln Ala Leu Glu Val Asp Leu Trp Ser Ser His Tyr Glu Lys
 35 40 45
 Met Gln Glu Asn Leu Arg Lys Leu Lys Glu Val Asn Lys Lys Leu Gln
 50 55 60
 Leu Glu Val Arg Arg Arg Phe Gly Glu Gly Leu Asn Gly Met Ser Leu
 65 70 75 80
 Ser Glu Leu Cys Gly Leu Glu Gln Asp Met Asp Asn Ala Val Ser Leu
 85 90 95
 Ile Arg Glu Arg Lys Tyr Lys Thr Leu Gly Asn Gln Ile Asp Thr Ala
 100 105 110
 Arg Lys Lys Lys Lys Asn Ala Glu Glu Ile Asn Lys Ser Leu Leu Gln
 115 120 125
 Asp Trp Thr Asn Leu Ile Lys His Leu Arg Glu Asp Asp Pro His Phe
 130 135 140
 Gly Met Val Asp Asn Gly Arg Asp Tyr Glu Ala Val Ile Gly Tyr Thr
 145 150 155 160
 Asp Ala Ala Ala Ala Arg Leu Tyr Thr Leu Arg Leu Gln Pro Asp
 165 170 175
 Gln Pro Asn Leu Thr Ser Gly Gly Gly Ser Glu Ile Thr Thr Tyr Pro
 180 185 190
 Leu Leu Glu
 195

<210> 2120
 <211> 92
 <212> PRT

<213> Eucalyptus grandis

<400> 2120

```

Met Ala Phe Lys Ser Pro Gly Gly Ile Thr Trp Leu Lys His Leu Leu
 1          5          10          15
Val Lys Asn Phe Tyr Leu Gly Glu His Leu Lys Cys Arg Asn Gly Leu
          20          25          30
Ile Lys Lys Ala Tyr Glu Leu Ser Val Leu Cys Asp Ile Asp Ile Ala
          35          40          45
Leu Ile Met Phe Ser Pro Ser Asp Arg Val Ser His Phe Ser Gly Lys
          50          55          60
Arg Arg Ile Glu Asp Val Leu Thr Arg Phe Ile Asn Leu Thr Asp Gln
65          70          75          80
Glu Arg Thr Leu Leu Asp Val Gln Asp Arg Arg Thr
          85          90

```

<210> 2121

<211> 41

<212> PRT

<213> Eucalyptus grandis

<400> 2121

```

Met Gly Arg Gly Arg Val Gln Leu Lys Arg Ile Glu Asn Lys Ile Asn
 1          5          10          15
Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
          20          25          30
Tyr Glu Leu Ser Leu Leu Cys Asp Ala
          35          40

```

<210> 2122

<211> 96

<212> PRT

<213> Eucalyptus grandis

<400> 2122

```

Leu Gln Tyr Asp Trp His His Leu Ser Phe Cys Val Ile Ile Ser Val
 1          5          10          15
Leu Asn Leu Gln Asn Thr Ile Asn Gly Ser Cys Ser Met Glu Ser Ile
          20          25          30
Leu Glu Arg Tyr Glu Arg Tyr Thr Tyr Ala Glu Arg Gln Gln Val Ala
          35          40          45
Thr Asp Ser Pro Gln Val Gln Gly Ser Trp Ser Leu Glu Tyr Pro Lys
          50          55          60
Leu Val Ala Arg Ile Glu Val Leu Gln Arg Asn Ile Arg Asn Leu Ser
65          70          75          80
Gly Glu Glu Leu Asp Pro Leu Ser Leu Arg Glu Leu Gln Tyr Leu Glu
          85          90          95

```

<210> 2123

<211> 76

<212> PRT

<213> Eucalyptus grandis

<400> 2123

```

Phe Leu Phe Arg Arg Lys Gln Gly Ala Val Glu Glu Leu Lys Met Val
 1          5          10          15
Gln Glu Val Arg Lys Gly Pro Trp Thr Glu Gln Glu Asp Phe Gln Leu
          20          25          30
Val Cys Phe Val Gly Leu Phe Gly Asp Arg Arg Trp Asp Phe Ile Ala
          35          40          45
Lys Val Ser Gly Leu Lys Val Ala Gly Glu Asn Asn Arg Tyr Val Arg

```

50 55 60
Phe Lys Ala Trp Gly Phe Phe Gly Arg Ser Tyr Phe
65 70 75

```
<210> 2124
<211> 55
<212> PRT
<213> Eucalyptus grandis
```

	<400>	2124													
Met	Gly	Arg	Ser	Pro	Cys	Cys	Glu	Lys	Ala	His	Thr	Asn	Lys	Gly	Ala
1				5					10					15	
Trp	Thr	Lys	Glu	Asp	Gln	Arg	Leu	Ile	Asp	Tyr	Ile	Arg	Leu	His	
			20				25					30			
Gly	Glu	Gly	Cys	Trp	Arg	Ser	Leu	Pro	Lys	Ser	Ala	Gly	Leu	Leu	Arg
		35					40					45			
Cys	Gly	Lys	Ser	Cys	Arg	Leu									
	50					55									

```
<210> 2125
<211> 123
<212> PRT
<213> Eucalyptus grandis
```

<div> <div><400></div> <div>2125</div> </div>															
Val	Glu	Gln	Val	Gln	Phe	Leu	Glu	Lys	Ser	Phe	Glu	Val	Glu	Asn	Lys
1				5					10					15	
Leu	Glu	Pro	Asp	Arg	Lys	Ile	Gln	Leu	Ala	Lys	Asp	Leu	Gly	Leu	Gln
			20					25					30		
Pro	Arg	Gln	Val	Ala	Ile	Trp	Phe	Gln	Asn	Arg	Arg	Ala	Arg	Trp	Lys
		35					40					45			
Thr	Lys	Gln	Leu	Glu	Lys	Asp	Tyr	Glu	Thr	Leu	Gln	Ala	Ser	Phe	Asn
	50					55					60				
Thr	Leu	Lys	Ser	Asp	Tyr	Asp	Thr	Leu	Ile	Lys	Glu	Arg	Asn	Asp	Leu
65					70					75					80
Lys	Ala	Glu	Val	Leu	Asn	Leu	Thr	Asp	Lys	Leu	Leu	His	Lys	Gly	Asn
				85					90					95	
Glu	Lys	Glu	Ser	Ser	Glu	Ser	Ser	Ser	Lys	Ser	Ser	Gln	Gly	Leu	Phe
			100					105					110		
Gln	Asn	Pro	Ile	Ala	Asp	Ser	Val	Ser	Glu	Asp					
		115					120								

```
<210> 2126
<211> 105
<212> PRT
<213> Eucalyptus grandis
```

Met	Ala	Arg	Phe	Pro	Arg	Val	Asp	Lys	Ser	Asn	Ser	Lys	Lys	Thr	Val
1				5					10					15	
Lys	Lys	Gly	Ala	Trp	Ser	Ala	Glu	Glu	Asp	Gln	Lys	Leu	Val	Ala	Tyr
			20					25					30		
Ile	Lys	Arg	Tyr	Gly	Ile	Trp	Asn	Trp	Thr	His	Met	Ala	Glu	Pro	Ala
		35					40					45			
Gly	Leu	Ala	Arg	Thr	Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Met	Asn	Tyr
	50					55					60				
Leu	Arg	Pro	Asn	Ile	Lys	His	Gly	Asn	Ile	Thr	Gln	Glu	Glu	Glu	Glu
65				70						75					80
Ile	Ile	Ile	Asn	Leu	His	Arg	Val	Leu	Gly	Asn	Arg	Trp	Ala	Ser	Ile
			85						90					95	
Ala	Ser	Arg	Leu	Ser	Gly	Arg	Thr	Asp							

100

105

<210> 2127
 <211> 115
 <212> PRT
 <213> Eucalyptus grandis

<400> 2127

Met	Ala	Arg	Glu	Lys	Ile	Lys	Ile	Lys	Lys	Ile	Asp	Asn	Val	Thr	Ala
1				5					10					15	
Arg	Gln	Val	Thr	Phe	Ser	Lys	Arg	Arg	Gly	Leu	Phe	Lys	Lys	Ala	
			20					25				30			
Gly	Glu	Leu	Ser	Val	Leu	Cys	Asp	Ala	Glu	Val	Ala	Val	Val	Ile	Phe
		35					40					45			
Ser	Ala	Thr	Gly	Lys	Leu	Phe	Glu	Tyr	Ser	Ser	Ser	Ser	Met	Lys	Asp
	50					55					60				
Thr	Leu	Glu	Arg	Tyr	Thr	Leu	His	His	Asn	Asn	Leu	Glu	Asn	Met	Asp
65					70					75				80	
Gln	Pro	Ser	Leu	Glu	Leu	Gln	Leu	Glu	His	Ser	Asn	Asn	Met	Arg	Leu
			85					90					95		
Ser	Lys	Glu	Val	Ala	Glu	Lys	Ser	His	Arg	Leu	Arg	Gln	Leu	Arg	Gly
			100					105					110		
Glu	Asp	Leu													
		115													

<210> 2128
 <211> 155
 <212> PRT
 <213> Eucalyptus grandis

<400> 2128

Met	Gly	Arg	Lys	Cys	Ser	Arg	Cys	Gly	Asn	Ile	Gly	His	Asn	Ser	Arg
1				5					10					15	
Thr	Cys	Thr	Thr	Phe	Met	Gly	Ala	Ala	Ser	Ala	Cys	Gly	Leu	Lys	Leu
			20					25					30		
Phe	Gly	Val	Gln	Leu	Asp	Leu	Ser	Ser	Ser	Ser	Pro	Pro	Ser	Ser	Ser
		35					40					45			
Ala	Ser	Ser	Gly	Ser	Ala	His	Pro	Tyr	Ser	Leu	Val	Ile	Lys	Lys	Ser
	50					55					60				
Leu	Ser	Met	Asp	Arg	Leu	Ser	Ser	Ser	Ser	Ala	Ser	Ser	Ser	Ser	Pro
65					70					75					80
Ser	Ser	Ser	Leu	Ser	Ser	Pro	Arg	Val	Leu	Ala	Asp	Glu	His	Cys	Asn
			85					90					95		
Lys	Thr	Ser	Leu	Gly	Tyr	Leu	Ser	Asp	Gly	Leu	Ala	Ala	Arg	Ser	Gln
			100					105					110		
Glu	Lys	Arg	Lys	Gly	Val	Pro	Trp	Thr	Glu	Glu	Glu	His	Arg	Thr	Phe
		115					120					125			
Leu	Met	Gly	Leu	Glu	Lys	Met	Gly	Lys	Gly	Asp	Trp	Arg	Gly	Ile	Ser
	130					135					140				
Arg	Asn	Tyr	Val	Thr	Thr	Arg	Thr	Pro	Thr	Gln					
145						150				155					

<210> 2129
 <211> 145
 <212> PRT
 <213> Eucalyptus grandis

<400> 2129

Arg	Gly	Trp	Arg	Gln	Ile	Glu	Glu	His	Val	Gly	Thr	Lys	Thr	Ala	Val
1				5					10					15	
Gln	Ile	Arg	Ser	His	Ala	Gln	Lys	Phe	Phe	Ser	Lys	Val	Ala	Arg	Gly

```

      20      25      30
Val Ser Gly Ser Ser Glu Gly Val Ile Lys Pro Ile Glu Ile Pro Pro
      35      40      45
Pro Arg Pro Lys Arg Lys Pro Met His Pro Tyr Pro Arg Lys Ser Val
      50      55      60
Asp Ser Lys Glu Val Lys Leu Ser Tyr Gln Gln Glu Arg Ser Pro Ser
65      70      75      80
Pro Ile Ser Ser Val Ala Asp Glu Asn Thr Gly Ser Pro Thr Ser Val
      85      90      95
Leu Ser Ala His Gly Ser Asp Met Leu Gly Ser Ala Ser Leu His Gln
      100      105      110
Gln Asn Arg Cys Ser Ser Pro Thr Ser Cys Thr Thr Asp Val Pro Ser
      115      120      125
Ile Gly Leu Ala Val Ile Glu Lys Gln Pro Glu Ile Phe Lys Glu Glu
      130      135      140
Asp
145

```

```

<210> 2130
<211> 156
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2130
Phe Gly His Glu Phe Thr Ser Ser Pro Ala Ser Ser Ser Ser Leu Ser
1      5      10      15
Ser Ser Arg Ile Ser Ile Gly Glu Asn Ser Asp Lys Ala Ser Leu Gly
      20      25      30
Tyr Leu Ser Asp Gly Leu Leu Gly Arg Ser Gln Glu Lys Lys Gly
      35      40      45
Val Pro Trp Thr Glu Glu Glu His Arg Thr Phe Leu Val Gly Leu Glu
      50      55      60
Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg Ser Tyr Val Thr
65      70      75      80
Thr Arg Thr Pro Ala Gln Val Ala Ser His Ala Gln Lys Tyr Phe Leu
      85      90      95
Arg Gln Val Ser Phe Asn Lys Lys Lys Arg Arg Ser Ser Leu Phe Asp
      100      105      110
Met Val Asp Val Lys Thr Ala Ala Gly Asp Arg Leu Gly Ser Leu Thr
      115      120      125
Ala Lys Pro Ser Glu Ser Val Pro Asn Cys Lys Met Gly Thr Leu Met
      130      135      140
Ser His Leu Gln Val His Asp Ala Arg Thr Thr Gln
145      150      155

```

```

<210> 2131
<211> 49
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2131
Met Val Gln Glu Val Arg Lys Gly Pro Trp Thr Glu Gln Glu Asp Phe
1      5      10      15
Gln Leu Val Cys Phe Val Gly Leu Phe Gly Asp Arg Arg Trp Asp Phe
      20      25      30
Ile Ala Lys Val Ser Gly Leu Lys Val Ala Gly Glu Asn Asn Arg Ile
      35      40      45
Glu

```

```

<210> 2132

```

<211> 151
 <212> PRT
 <213> Eucalyptus grandis

<400> 2132
 Asp Asp Val Cys Gly Gly Gly Lys Arg Pro Glu Arg Pro Phe Phe Cys
 1 5 10 15
 Thr Tyr Asp Gly Glu Glu Asn Gly Asp Asp Asp Tyr Asp Glu Tyr Leu
 20 25 30
 His Gln Pro Glu Lys Lys Arg Arg Leu Ser Ile Glu Gln Val Leu Tyr
 35 40 45
 Leu Glu Lys Ser Phe Glu Thr Asp Asn Lys Leu Glu Pro Asp Lys Lys
 50 55 60
 Val Gln Leu Ala Lys Glu Leu Gly Leu Gln Pro Arg Gln Val Ala Ile
 65 70 75 80
 Trp Phe Gln Asn Arg Arg Ala Arg Trp Lys Thr Lys Gln Met Glu Lys
 85 90 95
 Asp Phe Asp Lys Leu Gln Ala Ser Phe Asn Cys Leu Lys Ser Asp Tyr
 100 105 110
 Glu Ser Leu Leu Asn Glu Lys Glu Lys Leu Lys Ala Glu Val Ile His
 115 120 125
 Leu Thr His Gln Leu Glu Gln Arg Ser Asn Gly Ile Leu Asn His Ser
 130 135 140
 Thr Tyr Leu Asn Asn Cys Thr
 145 150

<210> 2133
 <211> 133
 <212> PRT
 <213> Eucalyptus grandis

<400> 2133
 Met Gly Ser Arg Thr Arg Val Gly Gly Gly Gly Asp Asp Gly Arg Val
 1 5 10 15
 Val Asn Gly Met Pro Ser Phe Val Pro Gln Leu Pro Thr Ser Asn Ser
 20 25 30
 Met Gly Ser Glu Gly Asn Ser Ile Arg Ser Ser Arg Ile Thr Asp Phe
 35 40 45
 Gly Thr Leu Glu Gln Ser Leu Gly Tyr Arg Ile Glu Asp Ala Val Asp
 50 55 60
 Leu Ser Arg Asn Pro Val Phe Asn Gln Met Lys Ser Ser Ala Gln Ala
 65 70 75 80
 Leu Gly Ala Asp Val Gln Phe Gly Ser Leu Asn Lys Ser Leu Ser Ser
 85 90 95
 Ser Asp Arg Asn Leu Ser Val Asn Ile Val Gly Ser Gln Thr Leu Ser
 100 105 110
 Met His Arg Glu Ser Gln Ser Asn Leu Val Ser Ile Pro Gly Ala His
 115 120 125
 Arg Glu Asn Trp Gly
 130

<210> 2134
 <211> 150
 <212> PRT
 <213> Eucalyptus grandis

<400> 2134
 Met Pro Pro Pro Arg Ala Ala Thr Pro Asp Val Ala Gly Asp Glu Ser
 1 5 10 15
 Ser Gly Ala Asp Ala Gly Ala Gly Glu Ile Met Leu Phe Gly Val Arg
 20 25 30

Val Val Val Asp Ser Met Arg Lys Cys Val Ser Leu Asn Asn Leu Ser
 35 40 45
 Gln Tyr Gln His Pro Gln Asp Ala Asn Pro Pro Asn Ala Ser Gly Gly
 50 55 60
 Ser Gly Gly Asn Lys Glu Ala Ala Lys Gly Tyr Ala Ser Ala Asp
 65 70 75 80
 Asp Ala Ala His Asn Pro Gly Gly Gly Arg Glu Arg Lys Arg Gly Val
 85 90 95
 Pro Trp Thr Glu Glu Glu His Arg Leu Phe Leu Leu Gly Leu Gln Lys
 100 105 110
 Val Gly Lys Gly Asp Trp Arg Ala Ile Ser Arg Asn Phe Val Lys Thr
 115 120 125
 Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr Phe Leu Arg
 130 135 140
 Arg Ser Asn Leu Asn Arg
 145 150

<210> 2135
 <211> 125
 <212> PRT
 <213> Eucalyptus grandis

<400> 2135
 Glu Asn Val Ala Ser Gly Ser Thr Glu Arg Pro Arg Ile Arg His Gln
 1 5 10 15
 His Ser Gln Ser Met Asp Gly Ser Thr Ser Ile Lys Pro Glu Met Leu
 20 25 30
 Met Ser Gly Ser Glu Asp Ala Ser Ala Ala Asp Ala Lys Lys Ala Met
 35 40 45
 Ser Ala Ala Lys Leu Ala Glu Leu Ala Leu Ile Asp Pro Lys Arg Ala
 50 55 60
 Lys Arg Ile Trp Ala Asn Arg Gln Ser Ala Ala Arg Ser Lys Glu Arg
 65 70 75 80
 Lys Met Arg Tyr Ile Ala Glu Leu Glu Arg Lys Val Gln Thr Leu Gln
 85 90 95
 Thr Glu Ala Thr Thr Leu Ser Ala Gln Leu Thr Leu Leu Gln Arg Asp
 100 105 110
 Thr Asn Gly Leu Thr Ala Glu Asn Ser Glu Leu Lys Leu
 115 120 125

<210> 2136
 <211> 72
 <212> PRT
 <213> Eucalyptus grandis

<400> 2136
 Met Ala Asp Ser Glu His Ser Ser Ser Asp Asp Thr Tyr Val Asp Ser
 1 5 10 15
 Arg Glu Glu Thr Ser Glu Glu Ser Lys Leu Asp Phe Ser Glu Asp Glu
 20 25 30
 Glu Thr Leu Val Ile Arg Met Tyr Asn Leu Val Gly Glu Arg Trp Ser
 35 40 45
 Leu Ile Ala Gly Arg Ile Pro Gly Arg Thr Ala Glu Glu Ile Glu Lys
 50 55 60
 Tyr Trp Asn Ser Arg Tyr Ser Thr
 65 70

<210> 2137
 <211> 135
 <212> PRT
 <213> Eucalyptus grandis

<400> 2137

```

Met Ala Gly Glu Glu Pro Tyr Ser Ala Asp Thr Asn Ser Asp Thr Phe
 1          5          10          15
Ala Asp Glu Glu Thr Leu Ile Pro Ser Ser Ser Glu Ala Leu Glu Ser
          20          25          30
Ala Trp Val Pro Thr Ser Ser Thr Ala His His Gly Ser Lys Ser Val
          35          40          45
Val Asn Phe Glu Asp Val Cys Gly Gly Gly Asp Thr Asn Thr Ala Pro
          50          55          60
Arg Pro Tyr Leu Arg Gln Ile Asp Leu Lys Glu Glu Ala Val Glu Glu
          65          70          75          80
Asp Tyr Gly Asp Gly Asn Phe Gln Pro Pro Gly Lys Lys Arg Arg Leu
          85          90          95
Ser Ala Asp Gln Val His Phe Leu Glu Arg His Phe Glu Val Glu Asn
          100          105          110
Lys Leu Glu Pro Glu Arg Lys Ile Gln Leu Ala Lys Asp Leu Gly Leu
          115          120          125
Gln Pro Arg Gln Val Ala Ile
          130          135

```

<210> 2138

<211> 123

<212> PRT

<213> Eucalyptus grandis

<400> 2138

```

Asp Thr Glu Asp Ser Lys Lys Lys Glu Arg His Ile Val Thr Trp Ser
 1          5          10          15
Gln Glu Glu Asp Asp Ile Leu Arg Glu Gln Ile Gly Ile His Gly Thr
          20          25          30
Glu Asn Trp Ser Ile Ile Ala Ser Lys Phe Lys Asp Lys Thr Thr Arg
          35          40          45
Gln Cys Arg Arg Arg Trp Tyr Thr Tyr Leu Asn Ser Asp Phe Lys Lys
          50          55          60
Gly Gly Trp Ser Pro Glu Glu Asp Val Leu Leu Cys Glu Ala Gln Lys
          65          70          75          80
Ile Phe Gly Asn Arg Trp Thr Glu Ile Ala Lys Val Val Ser Gly Arg
          85          90          95
Thr Asp Asn Ala Val Lys Asn Arg Phe Thr Thr Leu Cys Lys Lys Arg
          100          105          110
Ala Arg Tyr Glu Ala Leu Ala Lys Glu Asn Thr
          115          120

```

<210> 2139

<211> 126

<212> PRT

<213> Eucalyptus grandis

<400> 2139

```

Met Gly Arg Gln Pro Cys Cys Asp Lys Leu Gly Val Lys Lys Gly Pro
 1          5          10          15
Trp Thr Ala Glu Glu Asp Arg Lys Leu Val Asn Phe Ile Leu Thr His
          20          25          30
Gly Gln Cys Cys Trp Arg Ala Val Pro Lys Leu Ala Gly Leu Arg Arg
          35          40          45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp
          50          55          60
Leu Lys Arg Gly Leu Leu Asn Glu Ala Glu Glu Ser Leu Val Ile Asp
          65          70          75          80
Leu His Ala Thr Leu Gly Asn Arg Trp Ser Lys Ile Ala Ala Arg Leu

```

				85					90				95				
Pro	Gly	Arg	Thr	Asp	Asn	Glu	Ile	Lys	Asn	His	Trp	Asn	Thr	His	Ile		
			100					105					110				
Lys	Lys	Lys	Leu	Ile	Arg	Met	Gly	Ile	Asp	Pro	Val	Thr	His				
		115					120					125					

<210> 2140
 <211> 108
 <212> PRT
 <213> Eucalyptus grandis

Pro	Gly	Ser	Arg	Ser	Ser	Asn	Arg	Arg	Val	Glu	Arg	Lys	Lys	Gly	Asn		
1				5					10					15			
Pro	Trp	Thr	Glu	Glu	Glu	His	Arg	Arg	Phe	Leu	Ile	Gly	Leu	Gln	Lys		
			20					25					30				
Leu	Gly	Lys	Gly	Asp	Trp	Arg	Gly	Ile	Ala	Arg	Asp	Phe	Val	Thr	Thr		
		35					40					45					
Arg	Thr	Pro	Thr	Gln	Val	Ala	Ser	His	Ala	Gln	Lys	Tyr	Tyr	Ile	Arg		
		50				55					60						
Gln	Ser	Asn	Ala	Gly	Arg	Arg	Lys	Arg	Arg	Ser	Ser	Leu	Phe	Asp	Met		
65					70					75					80		
Ala	Pro	Asp	Met	Val	Cys	Leu	Leu	Tyr	Asp	Val	Ala	Ser	Ala	His	Ser		
				85					90					95			
Leu	His	Ser	Val	Gln	Ile	Ser	Gly	Ser	Cys	Met	Phe						
			100					105									

<210> 2141
 <211> 109
 <212> PRT
 <213> Eucalyptus grandis

Met	Arg	Lys	Pro	Cys	Cys	Asp	Lys	Gln	Asp	Thr	Asn	Lys	Gly	Ala	Trp		
1				5					10					15			
Ser	Lys	Gln	Glu	Asp	Gln	Lys	Leu	Ile	Asp	Tyr	Ile	Arg	Lys	His	Gly		
			20					25					30				
Glu	Gly	Cys	Trp	Arg	Thr	Leu	Pro	Lys	Ala	Ala	Gly	Leu	Leu	Arg	Cys		
		35					40					45					
Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Ile	Asn	Tyr	Leu	Arg	Pro	Asp	Leu		
		50				55					60						
Lys	Arg	Gly	Asn	Phe	Ala	Glu	Asp	Glu	Glu	Asp	Leu	Ile	Ile	Lys	Leu		
65					70					75					80		
His	Ala	Leu	Leu	Gly	Asn	Arg	Trp	Ser	Leu	Ile	Ala	Gly	Arg	Leu	Pro		
				85					90					95			
Gly	Arg	Thr	Asp	Asn	Glu	Val	Lys	Asn	Tyr	Trp	Asn	Ser					
			100					105									

<210> 2142
 <211> 65
 <212> PRT
 <213> Eucalyptus grandis

Ser	Pro	Glu	Glu	Asp	Glu	Lys	Leu	Phe	Asn	Tyr	Ile	Thr	Arg	Phe	Gly		
1					5				10					15			
Val	Gly	Cys	Trp	Ser	Ser	Val	Pro	Lys	Leu	Ala	Gly	Leu	Gln	Arg	Cys		
			20					25					30				
Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Ile	Asn	Tyr	Leu	Arg	Pro	Asp	Leu		
		35					40					45					
Lys	Arg	Gly	Met	Phe	Ser	Gln	Glu	Glu	Glu	Asp	Leu	Ile	Val	Ser	Leu		

50 55 60

His
65

<210> 2143
<211> 121
<212> PRT
<213> Pinus radiata

<400> 2143

Ala	Lys	Ser	Tyr	Leu	Gly	Ser	Leu	Thr	Glu	Thr	Ile	Gln	Ser	Leu	Asn
1				5					10					15	
Ala	Glu	Leu	Glu	Arg	Thr	Arg	Ser	Glu	Leu	Val	Glu	Ala	Lys	Lys	Arg
			20					25					30		
Glu	Glu	Glu	Ile	Ile	Ser	Lys	Glu	Ala	Glu	Arg	Val	Glu	Lys	Asn	Lys
		35					40					45			
Arg	Glu	Val	Glu	Asn	Leu	Glu	Leu	Asn	Leu	Leu	Gln	Thr	Thr	Ala	Glu
	50					55					60				
Ala	Gly	Arg	Ala	Lys	Leu	Glu	Leu	Glu	Thr	Ala	Tyr	Glu	Glu	Val	Gln
65					70					75					80
Ser	Ala	Arg	Leu	Glu	Thr	Ala	Gln	Leu	Arg	Ala	Ala	Leu	Glu	Ala	Thr
				85					90					95	
Glu	Gly	Lys	Phe	Glu	Ala	Met	Leu	Ser	Glu	Thr	Arg	Leu	Glu	Ala	Glu
			100					105					110		
His	Val	Lys	Gly	Ala	Ile	Glu	Lys	Tyr							
		115					120								

<210> 2144
<211> 71
<212> PRT
<213> Pinus radiata

<400> 2144

Glu	Ile	Leu	Val	Thr	Gln	Ile	Glu	Gln	Leu	Gln	Arg	Lys	Glu	Arg	Met
1				5					10					15	
Phe	Ser	Glu	Glu	Asn	Asn	Phe	Leu	Arg	Lys	Arg	Ile	Val	Asp	Pro	His
			20					25					30		
Ser	Val	Leu	Thr	Thr	Pro	Ala	Ser	Gly	Ser	Gly	Ser	Leu	Gln	Arg	Ser
		35					40					45			
Glu	Val	Glu	Thr	Gln	Leu	Val	Met	Arg	Pro	Pro	Ser	Ser	Asn	Ala	Asp
	50					55					60				
Phe	Leu	Phe	Asn	Ser	Ser	His									
65					70										

<210> 2145
<211> 110
<212> PRT
<213> Pinus radiata

<400> 2145

Ser	Leu	Val	Trp	Gly	Ala	Leu	Lys	Met	Gly	Lys	Thr	Lys	Met	Glu	Ile
1				5					10					15	
Lys	Arg	Ile	Gln	Asn	Pro	Ser	Arg	Arg	Gln	Val	Thr	Phe	Ser	Lys	Arg
			20					25					30		
Lys	Asn	Gly	Leu	Leu	Lys	Lys	Ala	Phe	Glu	Leu	Ser	Val	Leu	Cys	Asp
		35					40					45			
Ala	Glu	Val	Ala	Leu	Ile	Ile	Phe	Ser	Glu	Thr	Gly	Lys	Ile	Cys	Glu
	50					55					60				
Phe	Ala	Ser	His	Asp	Asp	Met	Ala	Thr	Ile	Leu	Glu	Lys	Tyr	Arg	Ile
65				70						75					80
Tyr	Thr	Glu	Thr	His	Gly	Asn	Met	Glu	Ser	Ser	Ser	Val	Gln	Ser	Val

85 90 95
 Lys Ile Gly Glu Ser Gln Leu Lys Ala Leu Arg Glu Lys Met
 100 105 110

<210> 2146
 <211> 50
 <212> PRT
 <213> Pinus radiata

<400> 2146
 Leu Arg Gly Ala Asn Gly Cys Thr Ile Pro Ser Ile Gly Leu Thr Ser
 1 5 10 15
 Ile Glu Arg Val Glu Val Gln Thr Gln Leu Val Met Arg Pro Pro His
 20 25 30
 Ala Thr Glu Met Asp Asp Asn Phe Met Asp Val Asp Asn Val Pro Leu
 35 40 45
 Ser Gly
 50

<210> 2147
 <211> 168
 <212> PRT
 <213> Pinus radiata

<400> 2147
 Glu Asp Gly Ser Leu Val Ile Cys Glu Arg Ser Leu Ser Ala Ala Gln
 1 5 10 15
 Gly Met Pro Met Val Ser Gln Ser Gln Ser Phe Val His Gly Glu Leu
 20 25 30
 Leu Ser Ser Gly Tyr Leu Ile Arg Pro Cys Glu Gly Arg Gly Ala Leu
 35 40 45
 Val Ile Met Val Asp His Arg Asn Leu Glu Ala Ser Ser Val Pro Glu
 50 55 60
 Ala Leu Arg Pro Leu Tyr Glu Ser Ser Thr Phe Ala Gln Lys Met
 65 70 75 80
 Thr Val Glu Ala Ser Tyr His Leu Gln Gly Lys Val Gln Pro Glu Met
 85 90 95
 Ile Ser Leu Ser Lys Lys Leu Gln Gln Pro Cys Asn Val Arg Ser Tyr
 100 105 110
 Ser Gln Arg Leu Cys Arg Gly Phe Asn Glu Ala Val Asn Thr Leu Pro
 115 120 125
 Asp Asp Gly Trp Met Ser Leu Ser Lys Asp Gly Leu Gly Asp Val Thr
 130 135 140
 Ile Cys Glu Ser Phe Val Lys Leu Pro Glu Pro Asn Ala Ser Gln Ile
 145 150 155 160
 Ala Tyr Val Asn Ser Met Gly Thr
 165

<210> 2148
 <211> 120
 <212> PRT
 <213> Pinus radiata

<400> 2148
 Glu Asn Glu Ser Leu Arg Ala Arg Leu Arg His Met Asn Gly Asp Asp
 1 5 10 15
 Ile Asn Ser Leu Lys Leu Pro Glu Leu Phe His Leu Glu Gln Gln Leu
 20 25 30
 Glu Thr Ala Ala Thr Gln Val Arg Arg Arg Lys Asp Gln Val Leu Asp
 35 40 45
 Asn Glu Lys Ile Lys Arg Arg Asn Lys Met Arg Arg Lys Glu Asp Glu

	50					55					60				
Asn	Ile	Ile	Leu	His	Glu	Met	Leu	Asp	Gln	His	His	Gly	Gln	Met	Glu
65					70					75					80
Glu	Asp	Asn	Ala	Gln	Ile	Asn	Phe	Leu	Phe	Cys	Gln	Pro	Leu	Asn	Arg
				85					90					95	
Ser	Asp	Thr	Thr	Phe	Pro	Ala	Ser	Leu	Leu	Arg	Leu	Gln	Pro	Asn	Gln
			100					105					110		
Pro	Asn	Leu	Gln	Asp	Ile	Gly	Tyr								
		115					120								

```
<210> 2149
<211> 165
<212> PRT
<213> Pinus radiata
```

[illegible]

```
<210> 2150
<211> 68
<212> PRT
<213> Pinus radiata
```

[illegible]

```
<210> 2151
<211> 152
<212> PRT
<213> Pinus radiata
```

<400> 2151
 Gln Ala Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile
 1 5 10 15
 Asn Tyr Leu Arg Pro Asp Leu Lys Arg Gly Thr Phe Ser Pro Gln Glu
 20 25 30
 Glu Asn Leu Ile Val Glu Leu His Ser Val Leu Gly Asn Arg Trp Ser
 35 40 45
 Gln Ile Ala Thr His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn
 50 55 60
 Leu Trp Asn Ser Cys Ile Lys Lys Lys Leu Arg Gln Arg Gly Ile Asp
 65 70 75 80
 Pro Asn Thr His Arg Pro Leu Ser Glu Val Asn Ala Glu Ala Gly Asp
 85 90 95
 Ser Lys Asn Asp Asn Ser Asn Lys Glu Val Glu Thr Gln Ala Ala Met
 100 105 110
 Asp Glu Ser His Val Ser Ala Gly Asn Glu Phe Lys His Leu Asn Ala
 115 120 125
 Ile Pro Arg Ala Asp Thr Ala Asn Pro Lys Phe Phe His Val Pro Val
 130 135 140
 Glu Asp Asn Thr Leu Ile Ala Ser
 145 150

<210> 2152
 <211> 89
 <212> PRT
 <213> Pinus radiata

<400> 2152
 Met Arg Cys Thr Arg Trp Gln Gly Leu Pro Phe Ser Ser Lys Pro Lys
 1 5 10 15
 Val Lys Lys Gly Leu Trp Ser Pro Glu Glu Asp Glu Lys Leu Ile Asn
 20 25 30
 Tyr Met Met Lys Asn Gly Leu Leu Gly Cys Ser Trp Ser Tyr Val Ala
 35 40 45
 Lys Gln Ile Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp
 50 55 60
 Thr Asn Tyr Leu Arg Pro Gly Leu Lys Arg Gly Ala Ile Ser Pro Glu
 65 70 75 80
 Glu Glu Gln Leu Ile Ile His Leu Gln
 85

<210> 2153
 <211> 94
 <212> PRT
 <213> Pinus radiata

<400> 2153
 Met Gly Arg Ala Pro Cys Cys Asp Lys Ala Asn Val Lys Lys Gly Pro
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Thr Lys Leu Lys Ala Phe Ile Glu Gln His
 20 25 30
 Gly Thr Gly Gly Asn Trp Ile Ala Leu Pro Gln Lys Ala Gly Leu Lys
 35 40 45
 Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu Arg Pro
 50 55 60
 Asp Ile Arg His Gly Gly Phe Ser Glu Asp Glu Asp Asn Ile Ile Cys
 65 70 75 80
 Ser Leu Tyr Ala Ser Ile Gly Ser Met Val Ser Ile Ile Ala
 85 90

<210> 2154

<211> 217
 <212> PRT
 <213> Pinus radiata

<400> 2154
 Met Val Arg Gly Lys Thr Gln Met Lys Arg Ile Glu Asn Asp Thr Ser
 1 5 10 15
 Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
 20 25 30
 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Gly Leu Ile Ile Phe
 35 40 45
 Ser Pro Arg Gly Lys Leu Tyr Glu Phe Ala Ser Pro Ser Met Glu Glu
 50 55 60
 Ile Leu Glu Lys Tyr Lys Lys Arg Ser Lys Glu Asn Gly Met Ala Gln
 65 70 75 80
 Thr Thr Lys Glu Gln Asp Thr Gln Tyr Ser Lys His Ser Lys Gln Lys
 85 90 95
 Leu Ala Asn Met Glu Glu Gln Ile Arg Ile Leu Glu Ser Thr Gln Arg
 100 105 110
 Lys Met Leu Gly Glu Gly Leu Glu Ser Cys Ser Met Ala Glu Leu Asn
 115 120 125
 Lys Leu Glu Ser Gln Ala Glu Arg Gly Leu Ser His Ile Arg Ala Arg
 130 135 140
 Lys Thr Glu Ile Leu Val Asp Gln Ile Glu Cys Leu Lys Arg Lys Glu
 145 150 155 160
 Arg Leu Leu Ser Glu Glu Asn Ala Leu Leu Ser Arg Lys Trp Val Asp
 165 170 175
 Arg Gln Ser Val Asp Gly Ser Gly Ser Thr Ser Ser Ser Ile Gly Leu
 180 185 190
 Gly Ser Ile Glu Gln Ile Glu Val Glu Thr Gln Leu Val Ile Arg Pro
 195 200 205
 Pro Asn Ala Gln Asp His Cys Ser Val
 210 215

<210> 2155
 <211> 113
 <212> PRT
 <213> Pinus radiata

<400> 2155
 Leu Gly Trp Gly Arg Gln Pro Ala Ala Leu Arg Thr Phe Ser Gln Arg
 1 5 10 15
 Leu Cys Lys Gly Phe Asn Glu Ala Val Asn Gly Phe Thr Asp Asp Gly
 20 25 30
 Trp Ser Leu Met Gly Asn Asp Gly Met Glu Asp Val Thr Ile Leu Val
 35 40 45
 Asn Ser Ser Pro Ser Lys Leu Phe Gly Gln Gln Phe Ala Ser Ser Asp
 50 55 60
 Gly Leu Pro Ala Leu Gly Gly Gly Ile Leu Cys Ala Lys Ala Ser Met
 65 70 75 80
 Leu Leu Gln Asn Val Pro Pro Ala Leu Leu Val Arg Phe Leu Arg Glu
 85 90 95
 His Arg Ser Glu Trp Ala Asp Ser Asn Ile Asp Ala Tyr Ser Ala Ala
 100 105 110
 Ser

<210> 2156
 <211> 107
 <212> PRT
 <213> Pinus radiata

<400> 2156

```

Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1      5      10      15
Trp Thr Lys Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
 20      25      30
Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
 35      40      45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50      55      60
Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Ile Ile Lys
 65      70      75      80
Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85      90      95
Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr
 100      105

```

<210> 2157

<211> 124

<212> PRT

<213> Pinus radiata

<400> 2157

```

Leu Trp Leu Arg Phe Ser Gly Met Asp Arg Ser Asn Ser Ala Thr Gly
 1      5      10      15
Glu Glu Asp Val Leu Ser Arg Cys Arg Glu Arg Lys Arg Phe Met Lys
 20      25      30
Leu Ala Ile Glu Asn Arg Tyr Lys Leu Ala Thr Ala His Val Ala Tyr
 35      40      45
Met Asp Ser Leu Arg Arg Met Gly Thr Gly Leu Arg Leu Phe Ala Glu
 50      55      60
Gly Glu Thr Met Ser Glu Ser Ser Tyr Ser Thr Ser Pro Ile Gly Thr
 65      70      75      80
Ser Glu Leu Ala Val Leu Pro Glu Lys Ser Val Ser Pro Ser Pro
 85      90      95
Phe Pro Ser Ser Ser Pro Ser Leu Ser Gln Pro Gln Ser Pro Arg Ser
 100      105      110
Glu Arg Ala Glu Ser Arg Ser Pro Leu Asp Ser Phe
 115      120

```

<210> 2158

<211> 110

<212> PRT

<213> Pinus radiata

<400> 2158

```

Asp Gly Leu Val Gln Asn Ser Arg Glu Arg Lys Lys Gly Val Pro Trp
 1      5      10      15
Thr Glu Glu Glu His Lys Met Phe Leu Leu Gly Leu His Lys Leu Gly
 20      25      30
Lys Gly Asp Trp Arg Gly Ile Ser Arg Asn Phe Val Thr Ser Arg Thr
 35      40      45
Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr Phe Leu Arg Gln Ser
 50      55      60
Asn Leu Asn Lys Arg Lys Arg Arg Ser Ser Leu Phe Asp Ile Ser Thr
 65      70      75      80
Asp Ser Met Glu Asp Cys Tyr Gln Gly Ile Pro Glu Leu Ser Pro Val
 85      90      95
Met His Asp Leu Ser Leu Gly Gln Asn Ser Ser Leu Thr Ser
 100      105      110

```

<210> 2159
 <211> 175
 <212> PRT
 <213> Pinus radiata

<400> 2159
 Ser Ser Pro Val Ser Lys Pro Lys Leu Arg Lys Gly Leu Trp Ser Pro
 1 5 10 15
 Glu Glu Asp Asp Lys Leu Ile Asn Tyr Met Met Lys Asn Gly Gln Gly
 20 25 30
 Cys Trp Ser Asp Val Ala Lys Gln Ala Gly Leu Gln Arg Cys Gly Lys
 35 40 45
 Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp Leu Lys Arg
 50 55 60
 Gly Ala Phe Ser Pro Gln Glu Glu Gln Leu Ile Ile His Leu His Ser
 65 70 75 80
 Ile Leu Gly Asn Arg Trp Ser Gln Ile Ala Ala Arg Leu Pro Gly Arg
 85 90 95
 Thr Asp Asn Glu Ile Lys Asn Phe Trp Asn Ser Cys Ile Lys Lys Lys
 100 105 110
 Leu Lys His Leu Ser Ala Ser Thr Asn Asn Ser Lys Ser Ile Ser Ala
 115 120 125
 Pro Asn Arg Thr Ser Thr Met Asn Ser Ser Ile Thr Pro Phe Ser Glu
 130 135 140
 Ser Ser Ala Glu Pro Leu Glu Val Met Ala Thr Arg Tyr Gln Pro Ser
 145 150 155 160
 Asn Ala Phe Asn His Glu Val Pro Thr Ala Glu Asn Gln Val Leu
 165 170 175

<210> 2160
 <211> 78
 <212> PRT
 <213> Pinus radiata

<400> 2160
 Met Gly Arg Ala Pro Cys Cys Glu Lys Val Gly Leu Lys Lys Gly Pro
 1 5 10 15
 Trp Thr Pro Glu Glu Asp Gln Lys Leu Leu Ala Tyr Ile Gln Glu His
 20 25 30
 Gly His Gly Ser Trp Arg Ala Leu Pro Gln Lys Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp
 50 55 60
 Ile Lys Arg Gly Lys Phe Asn Pro Gln Glu Glu Gln Thr Ile
 65 70 75

<210> 2161
 <211> 159
 <212> PRT
 <213> Pinus radiata

<400> 2161
 Arg Thr Pro Arg Cys Asp Gln Met Gly Leu Lys Lys Gly Pro Trp Thr
 1 5 10 15
 Pro Glu Glu Asp Gln Ile Leu Ile Ser Tyr Ile Asn Lys His Gly His
 20 25 30
 Gly Asn Trp Arg Ala Leu Pro Lys Gln Ala Gly Leu Met Arg Cys Gly
 35 40 45
 Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp Ile Lys
 50 55 60
 Arg Gly Asn Phe Ser Leu Lys Glu Glu Gln Thr Ile Ile His Leu His

65					70					75				80
Gln	Ile	Leu	Gly	Asn	Arg	Trp	Ser	Ala	Ile	Ala	Ser	His	Leu	Pro Gly
				85					90					95
Arg	Thr	Asp	Asn	Glu	Ile	Lys	Asn	Val	Trp	Asn	Thr	His	Leu	Lys Lys
			100					105					110	
Arg	Leu	Leu	Gln	Ile	Gly	Val	Asp	Pro	Val	Thr	His	Ala	Pro	Arg Gly
			115				120					125		
Tyr	Asn	Val	Ser	Asn	Cys	Tyr	Thr	Ala	Val	Asn	Ile	Arg	Asp	His His
	130					135					140			
Gly	Glu	Gln	Ala	Asp	His	Gln	Leu	Gln	Ser	His	Val	Cys	Val	Ser
145					150					155				

<210> 2162
 <211> 49
 <212> PRT
 <213> Pinus radiata

<400> 2162

Thr	Pro	Glu	Glu	Asp	Arg	Ile	Leu	Ile	Ser	Tyr	Ile	Lys	Arg	Asn Gly
1				5					10				15	
His	Gly	Lys	Trp	Leu	Ala	Leu	Pro	Lys	Gln	Ala	Gly	Leu	Ser	Arg Cys
			20					25				30		
Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Asn	Tyr	Leu	Arg	Pro	Asn	Ile
		35					40				45			

Lys

<210> 2163
 <211> 78
 <212> PRT
 <213> Pinus radiata

<400> 2163

Met	Gly	Thr	Gly	Glu	Ala	Thr	Pro	Thr	Lys	Pro	Ala	Ala	Lys	Pro
1				5				10					15	
Ser	Ser	Ser	Ser	Gln	Glu	Thr	Pro	Thr	Thr	Pro	Val	Tyr	Pro	Asp Trp
			20					25				30		
Ala	Ala	Ala	Phe	Gln	Ala	Tyr	Tyr	Gly	Pro	Gly	Ala	Thr	Pro	Pro Pro
		35					40				45			
Pro	Ala	Phe	Phe	Ala	Ser	Thr	Val	Gly	Ser	Ala	Pro	Thr	Pro	His Pro
	50					55					60			
Tyr	Met	Trp	Gly	Gly	Gln	Pro	Leu	Met	Pro	Pro	Tyr	Gly	Thr	
65					70					75				

<210> 2164
 <211> 113
 <212> PRT
 <213> Pinus radiata

<400> 2164

Met	Gly	Arg	Gly	Lys	Ile	Glu	Ile	Lys	Lys	Ile	Asp	Asp	Val	Thr Ser
1				5				10					15	
Arg	Gln	Val	Thr	Phe	Ser	Lys	Arg	Lys	Met	Gly	Ile	Phe	Lys	Lys Ala
			20					25				30		
His	Glu	Leu	Ser	Val	Leu	Cys	Asp	Ala	Glu	Val	Ala	Val	Leu	Ile Phe
		35					40				45			
Ser	Asn	Thr	Gly	Arg	Leu	Tyr	Asp	Tyr	Ala	Ser	Ser	Arg	Cys	Met Glu
	50					55					60			
Arg	Thr	Ile	Glu	Arg	Tyr	Glu	Lys	Cys	Thr	Lys	Ala	Ile	Asn	Cys Pro
65					70					75				80
Thr	Ser	Asp	Pro	Ile	Val	Glu	Asn	Lys	Ser	Pro	Ile	Gln	Glu	Gly Ile

85 90 95
 Glu Ile Leu Arg Gln Lys Leu Arg Ala Leu Gln Arg Leu Gln Arg Asn
 100 105 110
 Leu

<210> 2165
 <211> 107
 <212> PRT
 <213> Pinus radiata

<400> 2165
 Thr Lys Ala Ala Ile Lys Arg Leu Gln Ser Gln Ile Met Val Ala Phe
 1 5 10 15
 Gln Ala Val Asp Thr Thr Ser Ala Ala Ile Leu Lys Leu Arg Glu Asp
 20 25 30
 Glu Leu Tyr Pro Gln Leu Val Glu Leu Ser Lys Gly Leu Met Gln Met
 35 40 45
 Trp Arg Ala Met Tyr Glu Cys His Gln Val Gln Asn His Ile Val Gln
 50 55 60
 Gln Val Arg His Leu Gly Asn Leu Ala Ser Ala Glu Ala Thr Ser Ser
 65 70 75 80
 Tyr His Gln Gln Ala Thr Ile Gln Leu Glu Ala Gln Val Thr Ala Trp
 85 90 95
 Tyr Asp Ser Phe Cys Arg Met Ile Thr Ser Gln
 100 105

<210> 2166
 <211> 38
 <212> PRT
 <213> Pinus radiata

<400> 2166
 Met Gly Ala Pro Lys Gln Lys Trp Thr Ser Glu Glu Glu Gly Ala Leu
 1 5 10 15
 Arg Ala Gly Val Glu Lys Tyr Gly Ala Gly Lys Trp Gln Thr Ile Leu
 20 25 30
 Lys Asp Pro Glu Phe Ala
 35

<210> 2167
 <211> 158
 <212> PRT
 <213> Pinus radiata

<400> 2167
 Ser Gly His Met Asp Gly Gly Ser Gly Glu Asp Gln Asp Ala Ala Asp
 1 5 10 15
 Gln Asp His Asp His Asp His Asp His Asp His Glu Gln Gln Gln Thr
 20 25 30
 Arg Arg Lys Arg Tyr His Arg His Thr Ala Arg Gln Ile Gln Glu Met
 35 40 45
 Glu Ala Leu Phe Lys Glu Cys Pro His Pro Asp Asp Lys Gln Arg Gln
 50 55 60
 Arg Leu Ser Ile Glu Leu Gly Leu Lys Pro Arg Gln Val Lys Phe Trp
 65 70 75 80
 Phe Gln Asn Arg Arg Thr Gln Met Lys Ala Gln Gln Asp Arg Ser Asp
 85 90 95
 Asn Ala Ile Leu Arg Ala Glu Asn Glu Asn Leu Arg Asn Glu Asn Val
 100 105 110
 Ala Leu Arg Glu Ala Ile Lys Asn Gly Ala Cys Pro Asn Cys Gly Gly

115 120 125
 Ser Thr Ser Leu Gly Glu Met Pro Gly Phe Asp Glu His His Phe Arg
 130 135 140
 Ile Glu Asn Thr Arg Leu Lys Glu Glu Leu Asp Arg Val Ser
 145 150 155

<210> 2168
 <211> 122
 <212> PRT
 <213> Pinus radiata

<400> 2168
 Met Gly Cys Thr Gln Gly Gln Arg Gln Gly Glu Trp Glu Gly Lys Gly
 1 5 10 15
 Val Pro Ser Asn Ser Ser Arg Arg Ser Leu Arg Lys Gly Leu Trp Ser
 20 25 30
 Pro Asp Glu Asp Ile Glu Leu Thr Tyr Ile Met Arg Lys Gly Leu
 35 40 45
 Met Gly Cys Trp Asn Tyr Ile Ala Lys Gln Ala Gly Leu Gln Arg Cys
 50 55 60
 Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Gly Leu
 65 70 75 80
 Lys Arg Cys Ala Ile Ser Pro Gln Glu Glu Arg Leu Ile Ile Gln Leu
 85 90 95
 Gln Ser Ser Leu Gly Asn Arg Trp Ser Gln Ile Ala Ala His Leu Pro
 100 105 110
 Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr
 115 120

<210> 2169
 <211> 101
 <212> PRT
 <213> Pinus radiata

<400> 2169
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Gln Gln Glu Asp Thr Arg Leu Val Ala His Ile Arg Ala His
 20 25 30
 Gly Gln Gly Gly Trp Ser Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Gln Arg Trp Ile Asn Tyr Leu His Pro Asp
 50 55 60
 Leu Lys Arg Ser Asn Phe Ser Glu Glu Glu Asp Glu Leu Ile Val Arg
 65 70 75 80
 Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp
 100

<210> 2170
 <211> 133
 <212> PRT
 <213> Pinus radiata

<400> 2170
 Arg Leu Leu Pro Gly Arg Thr Asp Asn Ala Ile Lys Asn His Trp Asn
 1 5 10 15
 Ser Thr Leu Arg Arg Arg Tyr His Gly Glu Lys Asp Gln Ser Asn Gly
 20 25 30
 Leu Ala Val Asn Leu Glu Ser Ala Ala Glu Asp Lys Glu Thr Met Thr

```

          35          40          45
Pro Met Thr Pro Val Thr Ala Thr Ala Thr Ala Thr Ala Thr Ala Met
   50          55          60
Pro Val Ala Leu Val Phe Pro Thr Ala Ala Asp Asn Val Arg Lys Arg
65          70          75          80
Ser Asn Ser Ser Cys Ser Ala Asn Asp Asn Pro Gly Asp Ala Glu Val
          85          90          95
Glu Ser Cys Arg Leu Lys Arg Leu Asn Phe Ser Glu Ser Pro Ser Ser
          100          105          110
Ser Glu Asn Ile Asn Asn Asn Asn Asn Asn Glu Glu Ala Val Ser Gly
          115          120          125
His Cys Asn Ser Ala
   130

```

```

<210> 2171
<211> 120
<212> PRT
<213> Pinus radiata

```

```

<400> 2171
Met Arg Cys Lys Thr Gly Gln Ala Gln Gly Val Leu Glu Val Glu Gly
 1          5          10          15
Thr His Pro Ala Pro Ser Lys Pro Lys Leu Arg Lys Gly Leu Trp Ser
          20          25          30
Pro Val Glu Asp Asn Gln Leu Thr Asn Tyr Ile Leu Arg Arg Gly Leu
          35          40          45
Val Gly Cys Trp Asn Tyr Val Ala Lys Gln Ala Gly Leu Gln Arg Thr
          50          55          60
Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Gly Leu
65          70          75          80
Lys Arg His Pro Ile Ser Arg Gln Glu Glu Gln Leu Ile Ile Glu Leu
          85          90          95
Gln Ser Ile Leu Gly Asn Arg Trp Ser Gln Ile Ala Ala Gln Leu Pro
          100          105          110
Gly Arg Thr Asp Ile Glu Ile Lys
          115          120

```

```

<210> 2172
<211> 155
<212> PRT
<213> Pinus radiata

```

```

<400> 2172
Gln Gln Leu Glu Ser Ser Arg Ile Lys Leu Lys Gln Ile Glu Gln Glu
 1          5          10          15
Leu Glu Arg Val Lys Gln Gln Gly Ile Ser Ile Asn Gly His Leu Gly
          20          25          30
Asp His Asn Gly Ser Gly Ala Ala Ala Phe Asp Met Glu Tyr Gly Arg
          35          40          45
Trp Val Glu Glu Gln Asn Arg Gln Ala Arg Glu Leu Arg Ala Ser Leu
          50          55          60
Gln Ala His Leu Thr Asp Ser Glu Leu Cys Val Leu Val Asp Asn Ala
65          70          75          80
Ile Ala His Tyr Asp Glu Leu Phe Arg Met Lys Gly Ala Ala Ser Lys
          85          90          95
Leu Asp Val Phe His Leu Met Ser Gly Met Trp Lys Thr Pro Thr Glu
          100          105          110
Arg Cys Phe Met Trp Met Gly Gly Phe Arg Pro Ser Glu Leu Leu Lys
          115          120          125
Ile Leu Thr Pro Gln Ile Glu Pro Leu Thr Glu Gln Gln Ser Phe Ala
          130          135          140

```

Val Ser Ser Leu Lys Leu Ser Ser Gln Gln Ala
145 150 155

<210> 2173
<211> 63
<212> PRT
<213> Pinus radiata

<400> 2173
Met Val Arg Gly Lys Ile Gln Met Lys Arg Ile Glu Asn Thr Ala Ser
1 5 10 15
Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
20 25 30
Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Gly Leu Met Ile Phe
35 40 45
Ser Pro Gly Gly Lys Leu Tyr Glu Phe Ala Asn Thr Ser Met Glu
50 55 60

<210> 2174
<211> 76
<212> PRT
<213> Pinus radiata

<400> 2174
Arg Ala Arg Lys Thr Glu Ile Leu Val Thr Glu Ile Glu Gln Leu Gln
1 5 10 15
Arg Lys Glu Trp Ile Leu Ser Glu Glu Asn Ala Phe Leu Gly Lys Lys
20 25 30
Phe Val His Pro His Ser Val Ser Lys Thr Pro Gly Ser Glu Ser Gly
35 40 45
Ser Ile Gln Asn Ser Glu Val Glu Thr Gln Leu Val Met Arg Pro Pro
50 55 60
Cys Thr Asn Ala His Phe Leu Ile Asn Ser Ser His
65 70 75

<210> 2175
<211> 161
<212> PRT
<213> Eucalyptus grandis

<400> 2175
Arg Glu Ser Ala Asn Cys Ala Ser Arg Val Ala Asp Arg Arg Glu Asn
1 5 10 15
Arg Arg Arg Arg Asp Met Gly Asn Gln Lys Leu Lys Trp Thr Lys Glu
20 25 30
Glu Glu Glu Ala Leu Leu Ala Gly Ile Ala Lys His Gly Ala Gly Lys
35 40 45
Trp Lys Asn Ile Leu Lys Asp Pro Glu Phe Ala Pro Ala Leu Val Asn
50 55 60
Arg Ser Asn Ile Asp Leu Lys Asp Lys Trp Arg Asn Leu Ser Val Gly
65 70 75 80
Thr Ser Gly Gln Gly Ser Arg Asp Lys Gln Arg Leu Ser Lys Val Lys
85 90 95
Ser Leu Met Ala Ala Pro Gln Ser Ser Thr Val Pro Leu Asn Pro Gln
100 105 110
Ala His Ala Ala Ser Thr Asp Val Ala Leu Val Asn Ser Ser Asn Ser
115 120 125
Phe Gln Asp Gly Lys Asn Tyr Ser Leu Trp Val Ser Val Leu Leu Phe
130 135 140
Leu Phe Ser Asn Gly Asn Leu Phe Tyr Phe Tyr Pro Leu Leu Ser Phe
145 150 155 160

Leu

<210> 2176
 <211> 31
 <212> PRT
 <213> Eucalyptus grandis

<400> 2176
 Thr Arg Gln Ser Ala Arg Ala Leu Leu Ala Ile His Asp Tyr Phe Ser
 1 5 10 15
 Arg Leu Arg Ala Leu Ser Ser Leu Trp Leu Ala Arg Pro Arg Glu
 20 25 30

<210> 2177
 <211> 191
 <212> PRT
 <213> Eucalyptus grandis

<400> 2177
 Met Ala Ser Arg Lys Glu Val Asp Arg Ile Lys Gly Pro Trp Ser Pro
 1 5 10 15
 Glu Glu Asp Glu Ala Leu Arg Leu Leu Val Gln Lys His Gly Pro Arg
 20 25 30
 Asn Trp Ser Leu Ile Ser Lys Ser Ile Pro Gly Arg Ser Gly Lys Ser
 35 40 45
 Cys Arg Leu Arg Trp Cys Asn Gln Leu Ser Pro Gln Val Glu His Arg
 50 55 60
 Ala Phe Thr Pro Glu Glu Asp Asp Ile Ile Val Arg Ala His Ala Arg
 65 70 75 80
 Phe Gly Asn Lys Trp Ala Thr Ile Ala Arg Leu Leu Ser Gly Arg Thr
 85 90 95
 Asp Asn Ala Ile Lys Asn His Trp Asn Ser Thr Leu Lys Arg Lys Cys
 100 105 110
 Ser Pro Pro Leu Ser Pro Leu Ala Glu Glu Gly Asn Asn Arg Ala Phe
 115 120 125
 Asp Ala Ala Ala Gly Tyr Asp Gly Asp Leu Ser Pro Arg Glu Arg Pro
 130 135 140
 Ala Lys Arg Ser Ala Ser Ala Gly Pro Cys Leu Ser Pro Gly Ser Pro
 145 150 155 160
 Ser Gly Ser Gly Met Ser Asp Ser Ser Val His Phe Val Tyr Arg Pro
 165 170 175
 Val Ala Lys Thr Gly Pro Val Val Pro Pro Thr Val Glu Ala Thr
 180 185 190

<210> 2178
 <211> 113
 <212> PRT
 <213> Eucalyptus grandis

<400> 2178
 Gln Val Ala Gln Leu Arg Val Glu Asn Ser Thr Leu Leu Lys Arg Leu
 1 5 10 15
 Ser Asp Ile Ser Gln Lys Tyr Asn Val Ala Ala Val Asp Asn Arg Val
 20 25 30
 Leu Lys Ala Asp Val Glu Thr Leu Arg Ala Lys Val Lys Met Ala Glu
 35 40 45
 Glu Thr Val Lys Arg Val Thr Gly Leu Asn Pro Met Leu His Val Met
 50 55 60
 Ser Asp Met Ser Ser Val Gly Val Pro Pro Phe Asp Gly Ser Pro Ser
 65 70 75 80

[illegible]

```
<210> 2179
<211> 314
<212> PRT
<213> Eucalyptus grandis
```

	<400>			2179															
Met 1	Lys	Arg	Leu	Gly 5	Ser	Ser	Asp	Ser	Leu 10	Gly	Ala	Leu	Met 15	Ser	Ile				
Cys	Pro	Pro	Ser 20	Glu	Glu	Leu	Gln	His 25	Ser	Pro	Arg	Asn 30	Gly	Asn	Pro				
Ile	Tyr	His 35	Ser	Arg	Asp	Leu	Gln 40	Ser	Met	Leu	Glu	Leu 45	Gly	Leu	Asp				
Glu	Glu 50	Gly	Cys	Val	Glu	Asp 55	Gln	Ser	Ala	Gly	Gly 60	Gly	Gly	His	Val				
Gly 65	Gly	Glu	Lys	Lys 70	Arg	Arg	Leu	Ser	Ile	Asp 75	Gln	Val	Lys	Ala	Leu 80				
Glu	Lys	Asn	Phe 85	Glu	Val	Glu	Asn	Lys	Leu 90	Glu	Pro	Glu	Arg	Lys 95	Val				
Lys	Leu	Ala	Gln 100	Glu	Leu	Gly	Leu	Gln 105	Pro	Arg	Gln	Val	Ala 110	Val	Trp				
Phe	Gln	Asn 115	Arg	Arg	Ala	Arg	Trp	Lys 120	Thr	Lys	Gln	Leu 125	Glu	Arg	Asp				
Tyr	Gly 130	Val	Leu	Lys	Ser	Ser 135	Tyr	Glu	Ala	Leu	Lys 140	Leu	Ser	Tyr	Asp				
Ala 145	Leu	Lys	His	Asp	Asn 150	Glu	Ala	Leu	His	Lys 155	Glu	Ile	Lys	Glu	Leu 160				
Lys	Ser	Lys	Leu 165	Arg	Glu	Glu	Asp	Asp 170	Asn	Pro	Glu	Ser	Asn	Leu 175	Ser				
Val	Lys	Glu	Glu 180	Val	Ile	Ile	Pro	Gly 185	His	Asp	Val	Ser	Asp 190	Lys	Ile				
Arg	Ala	Ala 195	Asp	Asp	Gly	Asp	Asp 200	Asp	Thr	Lys	Arg	Ser 205	Pro	Pro	Pro				
Pro	Ile 210	Thr	Ala	Pro	Pro	Arg 215	Glu	Leu	Ser	Phe	Asn 220	Asn	Gly	Gly	Leu				
Lys 225	Asp	Gly	Ser	Ser 230	Asp	Ser	Asp	Ser	Ser	Ala 235	Ile	Val	Asn	Glu	Glu 240				
Asn	Ala	Ala	Thr 245	Ser	Ser	Ser	Ser	Pro	Asn 250	Pro	Ala	Val	Gln	Ser 255	His				
Gly	Gly	Phe 260	Leu	Lys	Phe	Met	Gly	Ser 265	Ser	Ser	Ser	Ser	Ala 270	Ser	Pro				
Pro	Pro	Ser 275	Pro	Pro	Ala	Ser	Phe 280	Gly	Gly	Cys	Phe	Ser 285	Phe	Gln	Phe				
Gln	Arg 290	Ala	Tyr	Gln	Pro	Gln 295	Pro	Gln	Pro	Pro	His 300	His	His	His	His				
His 305	Ser	Pro	Tyr	Val	Lys 310	Met	Glu	Glu	His										

```
<210> 2180
<211> 94
<212> PRT
<213> Eucalyptus grandis
```

<400> 2180
Glu Arg Tyr Lys Ser Ala Cys Ser Asp Ser Ser His Pro Gln Ser Val

1	5	10	15
Ser Asp Val	Asn Thr Gln Phe Tyr	Gln Gln Glu Ala Ser Lys	Leu Arg
	20	25	30
Arg Gln Ile	Arg Glu Ile Gln Val Ser	Asp Arg His Leu Leu Gly	Glu
	35	40	45
Gly Ile Ser	Asp Leu Ser Phe Lys Asp	Leu Lys Asn Leu Glu Ser	Lys
	50	55	60
Leu Glu Lys	Ser Ile Ser Arg Val Arg	Ser Lys Lys Asn Glu Met	Leu
65	70	75	80
Phe Ala Glu	Ile Glu Tyr Met Gln Lys	Arg Gly Leu Val Gln	
	85	90	

<210> 2181
 <211> 83
 <212> PRT
 <213> Eucalyptus grandis

<400> 2181			
Glu Asn Lys	Ile Asn Arg Gln Val Thr	Phe Ala Lys Arg Arg	Asn Gly
1	5	10	15
Leu Leu Lys	Lys Ala Tyr Glu Leu Ser	Val Leu Cys Asp Ala	Glu Val
	20	25	30
Ala Leu Ile	Ile Phe Ser Thr Arg Gly	Lys Leu Tyr Glu Phe	Cys Ser
	35	40	45
Ser Pro Ser	Met Leu Lys Thr Leu Asp	Arg Tyr Gln Lys Cys	Ser Tyr
	50	55	60
Gly Ser Val	Glu Val Asn Lys Pro Ser	Lys Glu Leu Glu Asn	Ala Tyr
65	70	75	80
Arg Glu Tyr			

<210> 2182
 <211> 108
 <212> PRT
 <213> Eucalyptus grandis

<400> 2182			
Met Gly Arg	Gly Lys Ile Glu Ile Gln	Lys Ile Glu Asn Asp	Thr Asn
1	5	10	15
Arg Gln Val	Thr Tyr Ser Lys Arg Arg	Asn Gly Ile Phe Lys	Ala
	20	25	30
His Glu Leu	Thr Val Leu Cys Asp Ala	Arg Val Ser Ile Leu	Met Leu
	35	40	45
Ser Gly Asn	Lys Lys Leu His Glu Tyr	Ile Ser Pro Thr Thr	Thr Thr
	50	55	60
Lys Arg Met	Ile Asp Asp Tyr Gln Lys	Ala Leu Gly Ile Asp	Leu Trp
65	70	75	80
Thr Thr His	Tyr Asp Arg Met Gln Glu	Glu Leu Arg Lys Leu	Lys Glu
	85	90	95
Val Asn Asn	Asn Phe Arg Lys Glu	Ile Arg Gln Ile	
	100	105	

<210> 2183
 <211> 40
 <212> PRT
 <213> Eucalyptus grandis

<400> 2183			
Arg Asn Leu	Met Gly Glu Asp Leu Gly	Thr Leu Asn Ser Lys	Glu Leu
1	5	10	15
Glu Gln Leu	Glu Arg Gln Leu Glu	Ala Ser Leu Lys His	Ile Arg Ser

20 25 30
 Thr Lys Thr Gln Cys Met Leu Asp
 35 40

<210> 2184
 <211> 161
 <212> PRT
 <213> Eucalyptus grandis

<400> 2184
 Met Val Phe Pro Thr Gln Ala Thr Pro Glu Glu Ser Pro Gln Arg Lys
 1 5 10 15
 Met Gly Arg Gly Lys Ile Glu Ile Lys Arg Ile Glu Asn Thr Thr Asn
 20 25 30
 Arg Gln Val Thr Phe Cys Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
 35 40 45
 Tyr Glu Leu Ser Val Leu Cys Glu Ala Glu Val Ala Leu Ile Val Phe
 50 55 60
 Ser Ser Arg Gly Arg Leu Tyr Glu Tyr Ala Asn Asp Ser Val Lys Ala
 65 70 75 80
 Thr Ile Glu Arg Tyr Lys Lys Ala Cys Ser Asp Ser Ser Ser Ser Gly
 85 90 95
 Ser Val Ser Glu Ala Asn Val Gln Phe Tyr Gln Gln Glu Ser Ala Lys
 100 105 110
 Leu Gln Gln Gln Ile Asn Asn Met Gln Asn Asn Asn Arg Gln Leu Val
 115 120 125
 Gly Asp Ser Ile Ala Gly Met Asn Met Lys Asp Met Lys Thr Thr Glu
 130 135 140
 Gln Lys Leu Glu Lys Ala Ile Ala Lys Ile Arg Ala Lys Lys Asn Ala
 145 150 155 160
 Ile

<210> 2185
 <211> 92
 <212> PRT
 <213> Eucalyptus grandis

<400> 2185
 Gln His Lys Glu Gln Met Leu Val Glu Ala Asn Arg Glu Leu Arg Lys
 1 5 10 15
 Lys Leu Glu Glu Ser Asn Thr Arg Ile Pro Leu Arg Leu Gly Trp Glu
 20 25 30
 Ala Glu Asp His Asn Asn Ile Ser Tyr Ser Arg Leu Pro Met Gln Ser
 35 40 45
 Gln Gly Leu Ile Phe Gln Pro Leu Gly Gly Asn Pro Thr Leu Gln Ile
 50 55 60
 Gly Tyr Asn Pro Ala Gly Ser Asn Glu Leu Asn Val Ser Ala Ala Asp
 65 70 75 80
 Gln His Pro Asn Gly Phe Ile Pro Gly Trp Met Leu
 85 90

<210> 2186
 <211> 113
 <212> PRT
 <213> Eucalyptus grandis

<400> 2186
 Gly Ser Lys Glu Leu Glu Ser Leu Glu Arg Gln Leu Asp Gly Ser Leu
 1 5 10 15
 Lys Gln Ile Arg Ser Arg Arg Thr Gln Tyr Met Leu Asp Lys Leu Thr

```

      20      25      30
Asp Leu Gln His Arg Glu Gln Leu Leu His Glu Ala Asn Arg Thr Leu
      35      40      45
Asn Gln Arg Leu Met Glu Gly Tyr Gln Val Asn Ala Leu Gln Leu Asn
      50      55      60
Gln His Ala Glu Glu Val Gly Gly Tyr Gly His Pro Pro Pro Pro
65      70      75      80
Leu Pro Pro Gln Pro Leu Ala Gln Pro His Ser Glu Ala Phe Phe Asn
      85      90      95
Pro Leu Glu Cys Glu Pro Thr Leu Gln Met Gly Tyr Gln Pro Asp Pro
      100      105      110
Val

```

```

<210> 2187
<211> 309
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2187
Met Thr Arg Arg Cys Ser His Cys Cys Asn Lys Gly His Asn Ser Arg
1      5      10      15
Thr Cys Pro Val Arg Gly Gly Gly Gly Asp Gly Gly Gly Ala Ala Ala
      20      25      30
Ala Pro Ser Ser Ser Ser Pro Ser Thr Ser Ser Ser Gly Ala Ala Ala
      35      40      45
Ala Ala Ala Ala Ser Ala Ser Gly Gly Gly Val Lys Leu Phe Gly Val
      50      55      60
Arg Leu Thr Asp Gly Ser Ile Met Lys Lys Ser Ala Ser Val Gly Cys
65      70      75      80
Leu Ser Ala Ala His Tyr His Ser Ser Ser Ser Ala Ala Ala Ser Pro
      85      90      95
Asn Pro Gly Ser Ser Pro Ile Asp Gly Ser Asp Gly Tyr Leu Ser Asp
      100      105      110
Asp Pro Ala Pro Gly Ser Arg Ser Ser Asn Arg Arg Val Glu Arg Lys
      115      120      125
Lys Gly Asn Pro Trp Thr Glu Glu Glu His Arg Arg Phe Leu Ile Gly
      130      135      140
Leu Gln Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asp Phe
145      150      155      160
Val Thr Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr
      165      170      175
Tyr Ile Arg Gln Ser Asn Ala Gly Arg Arg Lys Arg Arg Ser Ser Leu
      180      185      190
Phe Asp Met Ala Pro Asp Met Ala Thr Ala Asp Gln Pro Ser His Pro
      195      200      205
Glu Glu Thr Phe Leu Pro Pro Leu Val Arg Leu Asn Asp Asp Thr Asn
      210      215      220
Ser Thr Thr Ser Thr Ser Met Gly Leu Asp Leu Glu Arg Thr Pro Met
225      230      235      240
Glu Thr Ser His Pro Glu Thr Ser Glu Gly Gly Gly Asp Val Ala Met
      245      250      255
Glu Ser Ile Asp Gln Val Pro Leu Val Pro Cys Tyr Phe Pro Tyr Tyr
      260      265      270
Leu Pro Leu Pro Phe Pro Met Trp Pro Pro Asn Met Ala Pro Pro Glu
      275      280      285
Asp Gly Arg Val Val Glu Thr Ser His His Arg Val Leu Lys Pro Ile
      290      295      300
Pro Val Ile Pro Lys
305

```

<210> 2188
 <211> 123
 <212> PRT
 <213> Eucalyptus grandis

<400> 2188
 Trp Asp Thr Ser Ser Ser Pro Pro Thr Leu Leu Glu Ser Val Asp Asn
 1 5 10 15
 Phe Ile Leu Ser Pro Ala Arg Thr Gly Lys Ala Glu Ser Glu Cys Leu
 20 25 30
 Ser Pro Arg Asn Ser Gly Leu Leu Asp Ala Leu Val His Glu Ser Lys
 35 40 45
 Thr Met Ser Ser Ala Lys Asn Asn Ser Pro Glu Lys Ser Thr Asn Ser
 50 55 60
 Ser Ala Leu Thr Pro Gly Asp Ile Ser Ser Ser Thr Leu Asp Ile Cys
 65 70 75 80
 Lys Ser Glu Trp Glu Glu Tyr Gly Asp Pro Ile Ser Pro Pro Gly His
 85 90 95
 Ser Ala Thr Ser Val Phe Asn Gly Cys Thr Pro Leu Ser Thr Ser Gly
 100 105 110
 Ser Ser Leu Asp Glu Gln Pro Tyr Pro Asp Thr
 115 120

<210> 2189
 <211> 136
 <212> PRT
 <213> Eucalyptus grandis

<400> 2189
 His Ile Arg Arg Lys Leu Leu Asn Arg Gly Ile Asp Pro Ala Thr His
 1 5 10 15
 Arg Pro Leu Asn Glu Pro Ala Gln Asp Ala Thr Thr Ile Ser Phe Ala
 20 25 30
 Ala Ala Pro Ser Lys Gln Glu Pro Arg Asp Asp Ala Ile Ala Ala Ala
 35 40 45
 Leu Gly Tyr Lys Asn Glu Asn Asn Pro Thr Thr Thr Ala Ala Thr Val
 50 55 60
 Gln Glu Lys Cys Pro Asp Leu Asn Leu Glu Leu Arg Ile Ser Pro Pro
 65 70 75 80
 Cys Gln Gln Gln His Gln Pro Asp Ala Ser Met Gly Met Val Glu Gly
 85 90 95
 Asn His Cys Phe Ala Cys Ser Leu Gly Leu Gln Asn Ser Lys Glu Cys
 100 105 110
 Ser Cys Arg Arg Gly Ala Ser Gly Gly Ser Ser Ala His Gly Gly Tyr
 115 120 125
 Asp Phe Leu Gly Leu Lys Thr Ser
 130 135

<210> 2190
 <211> 109
 <212> PRT
 <213> Eucalyptus grandis

<400> 2190
 Met Glu Phe Pro Ser Glu Phe Ser Glu Ala Ser Ser Gln Lys Arg Ile
 1 5 10 15
 Gly Gly Arg Gly Lys Ile Glu Ile Lys Arg Ile Glu Asn Thr Thr Asn
 20 25 30
 Arg Gln Val Thr Phe Cys Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
 35 40 45
 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Val Phe

	50					55				60						
Ser	Ser	Arg	Gly	Arg	Leu	Tyr	Glu	Tyr	Ala	Asn	Asn	Ser	Val	Arg	Gly	
65					70					75					80	
Thr	Ile	Glu	Arg	Tyr	Lys	Lys	Ala	Ser	Ser	Asp	Ser	Ser	Thr	Ser	His	
				85					90					95		
Ser	Pro	Phe	Pro	Glu	Val	Glu	His	Ser	Ser	Phe	Ile	Gln				
			100					105								

```
<210> 2191
<211> 116
<212> PRT
<213> Eucalyptus grandis
```

[illegible]

```
<210> 2192
<211> 98
<212> PRT
<213> Eucalyptus grandis
```

[illegible]

```
<210> 2193
<211> 198
<212> PRT
<213> Eucalyptus grandis
```

<400> 2193
Met Gly Arg Gly Lys Val Glu Leu Lys Arg Ile Glu Asn Lys Ile Asn
1 5 10 15
Arg Gln Val Thr Phe Ala Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala

```

      20      25      30
Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Ile Phe
      35      40      45
Ser Asn Arg Gly Lys Leu Tyr Glu Phe Cys Ser Ser Ser Ser Met Met
      50      55      60
Lys Thr Ile Glu Lys Tyr Gln Lys Cys Ser Tyr Gly Ser Leu Glu Thr
      65      70      75      80
Asn Cys Ser Ile Asn Glu Met Gln Asn Ser Tyr Gln Asp Tyr Leu Lys
      85      90      95
Leu Lys Thr Arg Val Glu Val Leu Gln Arg Ser Gln Arg Asn Leu Leu
      100      105      110
Gly Glu Glu Leu Gly Pro Leu Asn Ser Lys Glu Leu Glu Gln Leu Glu
      115      120      125
His Gln Leu Glu Asn Ser Leu Lys Gln Ile Arg Ser Ala Lys Thr Gln
      130      135      140
Phe Met Phe Asp Gln Leu Ala His Leu Gln His Lys Glu Gln Met Leu
      145      150      155      160
Val Glu Ala Asn Arg Glu Leu Arg Lys Lys Leu Glu Glu Ser Asn Thr
      165      170      175
Arg Ile Pro Leu Arg Leu Gly Trp Glu Ala Glu Asp His Asn Asn Ile
      180      185      190
Ser Tyr Ser Arg Leu Pro
      195

```

```

<210> 2194
<211> 153
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2194
Met Arg Lys Pro Cys Cys Asp Lys Arg Asp Thr Asn Lys Gly Ala Trp
      1      5      10      15
Ser Lys Gln Glu Asp Gln Lys Leu Ile Asp Tyr Ile Gln Lys His Gly
      20      25      30
Glu Gly Ser Trp Arg Thr Leu Pro Gln Ala Ala Gly Leu Leu Arg Cys
      35      40      45
Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp Leu
      50      55      60
Lys Arg Gly Asn Phe Ala Glu Asp Glu Glu Asp Leu Ile Ile Lys Leu
      65      70      75      80
His Ala Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Leu Pro
      85      90      95
Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Ser His Leu Arg
      100      105      110
Arg Lys Leu Leu Lys Met Gly Ile Asp Pro Asn Asn His Arg Leu Asn
      115      120      125
Gln Asn Leu Pro Arg Ser Gln Thr Arg Met Pro Arg Gln His Phe Leu
      130      135      140
Ile Gln Tyr Glu Asp His Met Thr Leu
      145      150

```

```

<210> 2195
<211> 104
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2195
Glu Ala Leu Gln Gln Ser Leu Val Asp Thr Leu Ser Ser Thr Thr Leu
      1      5      10      15
Ser Pro Thr Gly Ser Gly Asn Val Ala Glu Tyr Met Gly Gln Met Ala
      20      25      30

```

Ile Ala Met Gly Lys Leu Ala Thr Leu Glu Asn Phe Val His Gln Ala
 35 40 45
 Asp Leu Leu Arg Gln Gln Thr Leu Gln Gln Met His Arg Ile Leu Thr
 50 55 60
 Thr Arg Gln Ala Ala Arg Ala Leu Leu Val Ile Asn Asp Tyr Ile Ser
 65 70 75 80
 Arg Leu Arg Ala Leu Ser Ser Leu Trp Leu Ala Arg Pro Arg Thr Glu
 85 90 95
 Asn Ile Cys Ser Ala Lys Leu Phe
 100

<210> 2196
 <211> 25
 <212> PRT
 <213> Eucalyptus grandis

<400> 2196
 Asp Pro Leu Met Lys Pro Trp Gln Ile Pro Cys Pro Ile Gln Pro Ile
 1 5 10 15
 Ile Ala Ser Ala Asp Leu Phe Glu Cys
 20 25

<210> 2197
 <211> 87
 <212> PRT
 <213> Eucalyptus grandis

<400> 2197
 Met Gly Arg Arg Lys Ile Glu Ile Gln Pro Ile Thr His Glu Arg Asn
 1 5 10 15
 Arg Ser Val Thr Phe Leu Lys Arg Lys Asn Gly Leu Phe Lys Lys Ala
 20 25 30
 Tyr Glu Leu Gly Val Leu Cys Ser Val Asp Val Ala Val Ile Ile Phe
 35 40 45
 Glu Asp Arg Pro Gly His Ser Pro Lys Leu Tyr Gln Tyr Ser Ser Arg
 50 55 60
 Gly Ile Gln Asp Ile Val Gln Arg His Leu His His Asp Gly Glu Thr
 65 70 75 80
 Asp Asn Arg Gly Pro Gly Asp
 85

<210> 2198
 <211> 107
 <212> PRT
 <213> Eucalyptus grandis

<400> 2198
 Arg Asp Arg Thr Phe Leu Val Gly Leu Glu Lys Leu Gly Lys Gly Asp
 1 5 10 15
 Trp Arg Gly Ile Ser Arg Ser Tyr Val Thr Thr Arg Thr Pro Ala Gln
 20 25 30
 Val Ala Ser His Ala Gln Lys Tyr Phe Leu Arg Gln Val Ser Phe Asn
 35 40 45
 Lys Lys Lys Arg Arg Ser Ser Leu Phe Asp Met Val Lys Asn Gln Cys
 50 55 60
 Ser Tyr Lys Leu Leu Pro Ser Tyr Arg Leu Ser Ser Ile Ser Leu Met
 65 70 75 80
 Gly Phe Asp Lys Phe Leu Leu Tyr Lys Val Asp Val Lys Thr Ala Ala
 85 90 95
 Gly Asp Arg Leu Gly Ser Leu Thr Ala Lys Pro
 100 105

<210> 2199
 <211> 107
 <212> PRT
 <213> Eucalyptus grandis

<400> 2199
 Met Thr Leu Glu Glu Phe Leu Val Arg Ala Gly Val Val Arg Glu Asp
 1 5 10 15
 Thr Gln Met Met Ala Arg Pro Gly Asp Asn Gly Val His Glu Glu Met
 20 25 30
 Ser Gln Phe Thr Ser Asn Gly Leu Ala Ser Ser Ala Ala Ala Gly Asn
 35 40 45
 Asp Phe Ile Phe Ser Ser Lys Pro Ala Gly Ser Ser Leu Asp Phe Ile
 50 55 60
 Gly Thr Arg Pro Thr Gln Leu Gln Gln Gln Pro Gln Pro Gln Pro Leu
 65 70 75 80
 Glu Pro Pro Ala Pro Leu Phe Pro Lys Pro Glu Thr Val Ser Phe Ala
 85 90 95
 Thr Ser Val His Leu Pro Asn Thr Ala Ser Tyr
 100 105

<210> 2200
 <211> 150
 <212> PRT
 <213> Eucalyptus grandis

<400> 2200
 Ala Asn Ala Pro Leu Arg Ile Ala Met Asn Ser Asn Ala Ser Ser Asn
 1 5 10 15
 Pro Gln Ser Met Ala Thr Ser Thr Thr Ser Ala Thr Thr Pro Ala Ala
 20 25 30
 Gly Gly Asp Gly Gly Lys Lys Val Arg Lys Pro Tyr Thr Ile Thr Lys
 35 40 45
 Ser Arg Glu Ser Trp Thr Glu Glu His Asp Lys Phe Leu Glu Ala
 50 55 60
 Leu Gln Leu Phe Asp Arg Asp Trp Lys Lys Ile Glu Asp Phe Val Gly
 65 70 75 80
 Ser Lys Thr Val Ile Gln Ile Arg Ser His Ala Gln Lys Tyr Phe Leu
 85 90 95
 Lys Val Gln Lys Asn Gly Ala Val Ala His Val Pro Pro Pro Arg Pro
 100 105 110
 Lys Arg Lys Ala Ala His Pro Tyr Pro Gln Lys Ala Ser Lys Asn Val
 115 120 125
 Leu Val Pro Leu Gln Ala Ser Met Ala Gln Pro Ser Ser Thr Asn Pro
 130 135 140
 Ala Phe Thr Ile Thr Pro
 145 150

<210> 2201
 <211> 171
 <212> PRT
 <213> Eucalyptus grandis

<400> 2201
 Met Gly Arg Ser Pro Cys Cys Glu Ser Glu His Met Asn Lys Gly Ala
 1 5 10 15
 Trp Ser Lys Glu Glu Asp Glu Arg Leu Ile Ala Tyr Ile Lys Arg His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45

Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Asn Phe Ser Asp Glu Glu Asp Glu Leu Ile Ile Thr
 65 70 75 80
 Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Ala Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Ile
 100 105 110
 Lys Arg Lys Leu His Ala Arg Gly Ile Asp Pro Gln Thr His Arg Pro
 115 120 125
 Leu Arg Leu His Gln His Cys Trp Cys Trp Cys Cys His Phe Thr
 130 135 140
 Leu Ser Val Leu Thr Leu Thr Thr Ala Ala Thr Arg Pro Arg Leu Thr
 145 150 155 160
 Arg Arg Leu Val Lys Asn Tyr His His His Gln
 165 170

<210> 2202
 <211> 98
 <212> PRT
 <213> Eucalyptus grandis

<400> 2202
 Met Asn Ser Pro Leu Ala Gln Leu Val Asn Pro Arg Arg Met His Thr
 1 5 10 15
 Tyr Glu Pro Phe Asp Gln Phe Pro Met Trp Gly Asp Thr Phe Lys Ala
 20 25 30
 Asp Lys Val Lys Asn Leu Glu Ala Ser Ser Ser Val Ile Val His Ala
 35 40 45
 Val Asp Asp Gly Leu Asp Lys Lys Phe Glu Tyr Val Ser His Glu Ser
 50 55 60
 Ala Glu Asn Ser Ser Ser Arg Ser Asp Gln Glu Ala Asn Arg Pro Asp
 65 70 75 80
 Lys Val Gln Arg Arg Leu Ala Gln Asn Arg Glu Ala Ala Arg Lys Ser
 85 90 95
 Arg Leu

<210> 2203
 <211> 111
 <212> PRT
 <213> Eucalyptus grandis

<400> 2203
 Met Asn Ser Pro Leu Ala Gln Leu Val Asn Pro Arg Arg Met His Thr
 1 5 10 15
 Tyr Glu Pro Phe Asp Gln Phe Pro Met Trp Gly Asp Thr Phe Lys Ala
 20 25 30
 Asp Lys Val Lys Asn Leu Glu Ala Ser Ser Ser Val Ile Val His Ala
 35 40 45
 Val Asp Asp Gly Leu Asp Lys Lys Phe Glu Tyr Val Ser His Glu Ser
 50 55 60
 Ala Glu Asn Ser Ser Ser Arg Ser Asp Gln Glu Ala Asn Arg Pro Asp
 65 70 75 80
 Lys Val Gln Arg Arg Leu Ala Gln Asn Arg Glu Ala Ala Arg Lys Ser
 85 90 95
 Arg Leu Arg Lys Lys Lys Tyr Val Gln Gln Leu Glu Ser Ser Arg
 100 105 110

<210> 2204
 <211> 162

<212> PRT

<213> Eucalyptus grandis

<400> 2204

```

Met Ala Ser Ser Ser Val Ala Ser Ala Arg Lys Asp Ala Asp Arg
 1          5          10          15
Ile Lys Gly Pro Trp Ser Pro Glu Glu Asp Glu Ala Leu Gln Arg Leu
          20          25          30
Val Gln Ser Tyr Gly Pro Arg Asn Trp Ser Leu Ile Ser Lys Ser Ile
          35          40          45
Pro Gly Arg Ser Gly Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu
          50          55          60
Ser Pro Gln Val Glu His Arg Pro Phe Thr Pro Glu Glu Asp Glu Ala
65          70          75          80
Ile Val Arg Ala His Ala Arg Phe Gly Asn Lys Trp Ala Thr Ile Ala
          85          90          95
Arg Leu Leu Asn Gly Arg Thr Asp Asn Ala Val Lys Asn His Trp Asn
          100          105          110
Ser Thr Leu Lys Arg Lys Cys Ser Ser Thr Cys Ser Ala Gly Gly Asp
          115          120          125
Asp Ala Asp Ala Leu Ala Glu Gln Gln Pro Leu Lys Arg Ser Ala Ser
          130          135          140
Leu Gly Thr Pro Thr Gly Gly Asn Asn Ala Val Ser Asp Leu Phe Phe
145          150          155          160
Ser Pro

```

<210> 2205

<211> 92

<212> PRT

<213> Eucalyptus grandis

<400> 2205

```

Met Ala Lys Glu Lys Ile Lys Ile Lys Lys Ile Asp Asn Leu Thr Ala
 1          5          10          15
Arg Gln Val Thr Phe Ser Lys Arg Arg Arg Gly Leu Ile Lys Lys Ala
          20          25          30
Glu Glu Leu Ser Val Leu Cys Asp Ala Asp Val Ser Leu Ile Val Phe
          35          40          45
Ser Ala Thr Gly Lys Leu Tyr Asp Phe Ser Ser Ser Arg Gln Met Lys
          50          55          60
Gly Glu Asp Leu Glu Gly Leu Asn Val Glu Glu Leu Asp Gln Leu Glu
65          70          75          80
Lys Lys Leu Glu Ala Gly Leu Ser Leu Val Ile Lys
          85          90

```

<210> 2206

<211> 148

<212> PRT

<213> Eucalyptus grandis

<400> 2206

```

Met Arg Lys Pro Asp Ala Ser Gly Lys Asn Ser Ser Asn Ser Asn Ala
 1          5          10          15
Asn Lys Leu Arg Lys Gly Leu Trp Ser Pro Glu Glu Asp Asp Lys Leu
          20          25          30
Met Asn Tyr Met Leu Asn Asn Gly Gln Gly Cys Trp Ser Asp Val Ala
          35          40          45
Arg Asn Ala Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp
          50          55          60
Ile Asn Tyr Leu Arg Pro Asp Leu Lys Arg Gly Ala Phe Ser Pro Gln

```

```

65          70          75          80
Glu Glu Glu Leu Ile Ile His Leu His Ser Ile Leu Gly Asn Arg Trp
      85          90          95
Ser Gln Ile Ala Ala Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys
      100          105          110
Asn Phe Trp Asn Ser Thr Ile Lys Arg Ser Arg Thr Arg His His
      115          120          125
Leu Leu Val Asp Thr Arg Gln Thr Arg Ala Ile Leu Leu Ala Ser Asp
      130          135          140
Val Lys Asp Val
145

```

```

<210> 2207
<211> 73
<212> PRT
<213> Eucalyptus grandis

```

```

<400> 2207
Ala Pro Glu Ile Ala Pro Pro Leu Ala Ala Pro Arg Gly Gly His His
 1          5          10          15
Arg Arg Ala His Ser Glu Val Asn Phe Arg Ile Pro Glu Asp Leu Asp
      20          25          30
Leu Gly Pro Asp Pro Phe Glu Asn Gly Pro Ser Gly Ser Phe Glu Asp
      35          40          45
Phe Gly Ser Glu Asp Asp Leu Leu Ser Thr Tyr Met Asp Ile Glu Lys
      50          55          60
Phe Gly Ser Ser Ser Thr Arg Ala Gly
65          70

```

```

<210> 2208
<211> 147
<212> PRT
<213> Eucalyptus grandis

```

```

<400> 2208
Ser Glu Asn Val Ser Gly Gly Ala Ile Glu Arg Pro Arg Ala Thr Gly
 1          5          10          15
Lys Leu Ala Ala Pro Val Asn Ser Pro Ser Met Ser Ser Ser Leu Asp
      20          25          30
Leu Lys Asn Ser Cys Met Asp Ala Asn Ala Asn Pro Val Ser Ile Leu
      35          40          45
Gln Pro Gly Val Val Pro Pro Glu Ala Trp Leu Gln Val Met Ser Leu
      50          55          60
Cys Gly Arg Leu Leu Lys Ile Phe Pro Trp Lys Ala Ser Thr Ser Val
65          70          75          80
Leu Ser Ala Val Ser Ser Ser Cys Ser Leu Gln Tyr His Arg Leu Cys
      85          90          95
Phe Ser Lys Phe Ala Leu Cys Lys Asn Glu Arg Glu Leu Lys Arg Glu
      100          105          110
Arg Arg Lys Gln Ser Asn Arg Glu Ser Ala Arg Arg Ser Arg Leu Arg
      115          120          125
Lys Gln Ala Glu Thr Glu Glu Leu Gly Lys Lys Val Asp Ser Leu Ser
      130          135          140
Ala Glu Asn
145

```

```

<210> 2209
<211> 115
<212> PRT
<213> Eucalyptus grandis

```

<400> 2209

```

Phe Phe Leu Tyr Ile Ile Ser Leu Phe Leu Val Arg Glu Asn Ser Glu
 1           5           10           15
Arg Ser Arg Glu Gly Thr Ser Ser Asn Gly Asp Gly Lys Ser Glu Val
          20           25           30
Gln Gly Lys Val Ala Gly Glu Val Asp Ala Ala Ser Glu Asn Val Ser
          35           40           45
Gly Gly Ala Ile Glu Arg Pro Arg Ala Thr Gly Lys Leu Ala Ala Pro
          50           55           60
Val Asn Ser Pro Ser Met Ala Ser Ser Leu Asp Leu Lys Asn Ser Cys
          65           70           75           80
Met Asp Ala Asn Ala Asn Pro Val Ser Ile Leu Gln Pro Gly Val Val
          85           90           95
Pro Pro Glu Ala Trp Leu Gln Asn Glu Arg Glu Leu Lys Arg Glu Arg
          100          105          110
Arg Glu Gln
          115

```

<210> 2210

<211> 192

<212> PRT

<213> Eucalyptus grandis

<400> 2210

```

Met Gly Arg Gln Pro Cys Cys Asp Lys Ser Gly Val Lys Lys Gly Pro
 1           5           10           15
Trp Thr Ala Glu Glu Asp Lys Lys Leu Ile Asn Phe Ile Leu Thr Asn
          20           25           30
Gly His Cys Cys Trp Arg Ala Val Pro Lys Leu Ala Gly Leu Arg Arg
          35           40           45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp
          50           55           60
Leu Lys Arg Gly Leu Leu Ser Glu Ala Glu Glu Gln Leu Val Ile Asp
          65           70           75           80
Leu His Ala Arg Leu Gly Asn Arg Trp Ser Lys Ile Ala Ala Arg Leu
          85           90           95
Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn His Trp Asn Thr His Ile
          100          105          110
Lys Lys Lys Leu Leu Lys Met Gly Ile Asp Pro Val Thr His Glu Pro
          115          120          125
Leu Asn Lys Pro Gln Lys Thr Pro Ser Glu His Asp Pro Glu Ala Ser
          130          135          140
Leu Ser Ser Ser Gln Ala Asp Pro Thr Ser Glu Ser Pro Ala Asn Thr
          145          150          155          160
His Gln Pro Asn Asn Ala His Ala Asp Glu Val Gln Leu Val Leu Val
          165          170          175
Leu Pro Val Gly Leu Val Arg Arg Glu Leu Leu Leu Arg Gln Gly Arg
          180          185          190

```

<210> 2211

<211> 89

<212> PRT

<213> Pinus radiata

<400> 2211

```

Leu Ser Arg Asn Met Asp Asp Val Phe Val Gln Arg Cys Asn Arg Asn
 1           5           10           15
Phe Thr Ala Arg Asp Arg Leu Ile Ser Lys Glu Arg Arg Asn Phe Gly
          20           25           30
Trp Val Cys Gly Val Thr Glu Glu Glu Glu Glu Leu Ile Ile Arg Met
          35           40           45

```

Tyr Lys Leu Val Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Leu Pro
 50 55 60
 Gly Arg Lys Ala Glu Glu Ile Glu Arg Tyr Trp Lys Met Arg Ser Ile
 65 70 75 80
 Asn Ala Ala Pro Leu Lys Pro Asn Thr
 85

<210> 2212
 <211> 237
 <212> PRT
 <213> Pinus radiata

<400> 2212
 Met Val Lys Glu Leu Leu Met Met Cys Ser Asn Cys Gly His Ser Gly
 1 5 10 15
 His Ser Ser Arg Ala Cys Pro Asp Arg Gly Ser Val Lys Leu Phe Gly
 20 25 30
 Val Arg Leu Ile Ala Thr Asp Asp Gly Met Ala Cys Met Arg Lys Ser
 35 40 45
 Leu Ser Met Gly Asn Leu Gly His Tyr Arg Ser Leu Tyr Asn Val Asn
 50 55 60
 His Cys Ser Gly Thr Ser Glu Cys Gly Ser Ala Asp Gln Asp Gly Tyr
 65 70 75 80
 Leu Ser Asp Gly Phe Val His Ser Ser Ser Asn Ala Arg Glu Arg Lys
 85 90 95
 Lys Gly Val Pro Trp Ser Glu Glu Glu His Arg Met Phe Leu Tyr Gly
 100 105 110
 Leu Glu Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg Asn Phe
 115 120 125
 Val Thr Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr
 130 135 140
 Phe Leu Arg Gln Ser Asn Leu Asn Lys Arg Lys Arg Arg Ser Ser Leu
 145 150 155 160
 Phe Asp Met Cys Pro His Asp Ser His Val Thr Ser Ser Phe Arg Arg
 165 170 175
 Glu Asp Ser Leu Gly Asn Leu Tyr Glu Phe Ser Pro Lys His Ser Ala
 180 185 190
 Leu Gly Val Ser Pro Asn Phe Glu Leu Tyr Ser Phe Gly Val Ser Pro
 195 200 205
 Thr Leu Ser Leu Gly Arg Ser Leu Gln Pro Val Glu Ala Val Leu Glu
 210 215 220
 Glu Lys Ala Ala His Tyr His Pro Val Asn Ser Glu Glu
 225 230 235

<210> 2213
 <211> 55
 <212> PRT
 <213> Pinus radiata

<400> 2213
 Trp Leu Gln Leu Cys Ser Gly Ile Asp Glu His Ala Ala Gly Phe Cys
 1 5 10 15
 Ser Gln Leu Val Phe Ala Pro Ile Asp Ala Ser Phe Ala Asp Asp Ala
 20 25 30
 Pro Leu Ala Pro Ser Gly Phe Arg Val Ile Pro Leu Glu Ser Gly Ser
 35 40 45
 Glu Cys Phe Ser Ser Lys Thr
 50 55

<210> 2214
 <211> 119

<212> PRT

<213> Pinus radiata

<400> 2214

Gly Val Leu Lys Phe Pro Cys Phe Asp Leu Ile Thr Met Asn Leu Met
 1 5 10 15
 Glu Ser Phe Glu Ala Lys Gly Lys Gly Glu Lys Arg Arg Thr Val Arg
 20 25 30
 Gly Lys Thr Gln Leu Lys Arg Ile Glu Asn Gly Thr Ser Arg Gln Val
 35 40 45
 Thr Phe Cys Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala Tyr Glu Leu
 50 55 60
 Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Val Phe Ser Pro Arg
 65 70 75 80
 Gly Lys Leu Tyr Glu Phe Ala Asn Pro Ser Met Gln Lys Met Leu Glu
 85 90 95
 Arg Tyr Glu Lys Cys Ser Glu Gly Ser Asn Pro Thr Ser Thr Ala Lys
 100 105 110
 Glu Gln Asp Val Gln Cys Leu
 115

<210> 2215

<211> 146

<212> PRT

<213> Pinus radiata

<400> 2215

Pro Lys Gln Asp Gln Lys Leu Val Thr Tyr Ile Gln Glu His Gly His
 1 5 10 15
 Gly Ser Trp Arg Ala Leu Pro Gln Lys Ala Gly Leu Leu Arg Cys Gly
 20 25 30
 Lys Ser Cys Arg Leu Arg Trp Ala Asn Tyr Leu Arg Pro Asp Ile Lys
 35 40 45
 Arg Gly Lys Phe Thr Val Gln Glu Glu Gln Thr Ile Ile Gln Leu His
 50 55 60
 Ala Leu Leu Gly Asn Arg Trp Ser Ala Ile Ala Thr His Leu Pro Lys
 65 70 75 80
 Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Leu Lys Lys
 85 90 95
 Arg Leu Leu Gln Met Gly Ile Asp Pro Val Thr His Lys Pro Lys Ser
 100 105 110
 Glu Ser Ile Met Val Pro Gly Val Gln Ser Ser Asn Gly Ser Ser Asn
 115 120 125
 Leu Ser His Met Ala Gln Trp Glu Ser Ala Arg Leu Glu Ala Glu Ser
 130 135 140
 Lys Ala
 145

<210> 2216

<211> 106

<212> PRT

<213> Pinus radiata

<400> 2216

Gly Ile Phe Ile Gly Gly Ser Cys Val Gly Gly Asp Gln Ser His Ser
 1 5 10 15
 Met Ser Gly Asn Gly Ala Leu Ala Phe Asp Met Glu Tyr Ala Arg Trp
 20 25 30
 Leu Asp Glu His His Arg Gln Ile Asn Glu Leu Arg Ser Ala Val Asn
 35 40 45
 Ser His Val Gly Asp Asn Glu Leu Arg Gly Leu Val Glu Gly Val Met

50		55		60											
Gly	His	Tyr	Asp	Glu	Ile	Phe	Arg	Leu	Lys	Thr	Val	Ala	Ser	Lys	Ala
65				70					75						80
Asp	Val	Phe	His	Leu	Val	Ser	Gly	Met	Trp	Lys	Thr	Pro	Ala	Glu	Arg
			85						90					95	
Cys	Phe	Met	Trp	Met	Gly	Gly	Phe	Arg	Pro						
			100					105							

<210> 2217
 <211> 114
 <212> PRT
 <213> Pinus radiata

<400> 2217

Asn	Arg	Arg	Ala	Arg	Thr	Lys	Trp	Lys	Arg	Asn	Glu	Val	Glu	Cys	Asp
1			5					10					15		
Asn	Leu	Lys	Arg	Cys	Cys	Glu	Ser	Leu	Arg	Glu	Glu	Asn	Arg	Arg	Leu
			20					25				30			
Glu	Lys	Glu	Val	Gln	Ser	Leu	Arg	Ala	Met	Lys	Val	Pro	Gln	Ser	Pro
		35				40					45				
Asn	Ser	Met	Pro	Leu	Ala	Ala	Thr	Leu	Ala	Met	Cys	Pro	Ala	Cys	
50					55			60							
Glu	Gly	Leu	Ala	Ile	Lys	Asn	Arg	Gly	Ala	Ala	Thr	Ser	Ser	Thr	Ala
65				70				75						80	
Lys	Ser	Gln	Gln	Ser	Leu	Leu	Thr	Ile	Met	Gly	Ile	Gly	Asp	Val	Asn
			85					90					95		
Met	Ile	Ser	Lys	Asn	Asn	Gln	Thr	Pro	Ser	Met	Gly	Met	Gly	Asp	Glu
			100					105					110		
Met	Asn														

<210> 2218
 <211> 126
 <212> PRT
 <213> Pinus radiata

<400> 2218

Trp	Asn	Leu	Ile	Glu	Glu	Lys	Ile	Glu	Gly	Arg	Ser	Gly	Lys	Ser	Cys
1			5					10					15		
Arg	Leu	Arg	Trp	Phe	Asn	Gln	Leu	Asp	Pro	Arg	Ile	Asn	Arg	Arg	Pro
			20					25				30			
Phe	Thr	Glu	Glu	Asp	Glu	Glu	Lys	Leu	Leu	Ala	Ala	His	Arg	Leu	Tyr
		35				40					45				
Gly	Asn	Lys	Trp	Ala	Met	Ile	Ala	Arg	Leu	Phe	Pro	Gly	Arg	Thr	Asp
50					55			60							
Asn	Ala	Val	Lys	Asn	His	Trp	His	Val	Ile	Met	Ala	Arg	Arg	Tyr	Arg
65				70				75						80	
Glu	Gln	Ser	Ser	Ala	Phe	Gly	Arg	Arg	Lys	Leu	Pro	Gln	Val	His	Arg
			85					90					95		
Arg	Glu	Lys	Arg	Ala	Cys	Thr	Asp	Asp	Glu	Thr	Arg	Met	Gly	Ser	Ser
			100					105					110		
Ser	Cys	Asn	Met	Trp	Val	Asp	Lys	Tyr	Ser	Ser	Leu	Lys	Ser		
		115					120					125			

<210> 2219
 <211> 123
 <212> PRT
 <213> Pinus radiata

<400> 2219

Leu	Ile	Ala	Tyr	Ile	Arg	Ala	Asn	Gly	Glu	Gly	Ser	Trp	Arg	Ser	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----


```

1           5           10           15
Pro Lys Ala Ala Gly Leu Pro Arg Cys Gly Lys Ser Cys Arg Leu Arg
20
Trp Ile Asn Tyr Leu Arg Pro Asp Leu Lys Arg Gly Ser Phe Thr Glu
35
Glu Glu Asp Glu Leu Ile Ile Lys Leu His Ser Val Val Gly Asn Lys
50
Trp Ser Leu Ile Ala Gly Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile
65
Lys Asn Tyr Trp Asn Thr His Ile Lys Arg Lys Leu Leu Ile Lys Gly
85
Ile Asp Pro Gln Ser His Arg Pro Leu Gly Gln Pro Tyr Ser Ser Asn
100
Asn Met Pro Val Ser Arg Leu Phe Leu Thr Ser
115

```

<210> 2220
 <211> 176
 <212> PRT
 <213> Pinus radiata

```

<400> 2220
Leu Ser Asn Ile Glu Pro Lys Gln Ile Lys Val Trp Phe Gln Asn Arg
1           5           10           15
Arg Cys Arg Glu Lys Gln Arg Lys Glu Ala Ser Arg Leu Gln Thr Val
20
Asn Arg Lys Leu Thr Ala Met Asn Lys Leu Leu Met Glu Glu Asn Asp
35
Arg Leu Gln Lys Gln Val Ser Gln Leu Val Tyr Glu Asn Gly Tyr Met
50
Arg Gln Gln Leu Gln Asn Ala Ser Val Ala Ala Thr Asp Thr Ser Cys
65
Glu Ser Val Val Thr Ser Gly Gln His Gln His Asn Pro Thr Pro Gln
85
His Pro Pro Arg Asp Ala Ser Pro Ala Gly Leu Leu Ser Ile Ala Glu
100
Glu Thr Leu Thr Glu Phe Leu Ser Lys Ala Lys Gly Ala Ala Val Asp
115
Trp Val Gln Met Pro Gly Met Lys Pro Gly Pro Asp Ser Ile Gly Ile
130
Val Ala Ile Ser Asn Thr Cys Asn Gly Val Ala Ala Arg Ala Cys Gly
145
Leu Val Gly Leu Asp Pro Thr Lys Val Ala Glu Ile Leu Lys Asp Arg
165

```

<210> 2221
 <211> 119
 <212> PRT
 <213> Pinus radiata

```

<400> 2221
Leu Tyr Gln Cys Gln Ala Leu Phe Glu Asn Gly Ala Val Glu Lys Leu
1           5           10           15
Ser Arg Thr Tyr Asn Asp Leu Tyr Asp Asp Leu Lys Glu Glu Ile Leu
20
Ser Trp Leu Pro Val Glu Cys Val Cys Arg Phe Arg Ser Val Ser Lys
35
Gln Trp Asn Asn Leu Leu Ser Ser His Asn Phe Ile Lys Lys Val Trp
50
Arg Lys Lys Pro Ala Asn Met Asn Pro Trp Leu Val Leu His Pro Val
65

```

[illegible]

```
<210> 2222
<211> 124
<212> PRT
<213> Pinus radiata
```

<400> 2222															
Asp 1	Lys	Lys	Leu	Ile 5	Asn	Phe	Leu	Thr	Thr 10	His	Gly	Gln	Cys	Cys 15	Trp
Arg	Thr	Val	Pro 20	Glu	Leu	Ala	Gly	Ile 25	Ser	Arg	Cys	Gly	Lys 30	Ser	Cys
Arg	Leu	Arg 35	Trp	Thr	Asn	Tyr	Leu 40	Arg	Pro	Asp	Leu	Lys 45	Arg	Gly	Val
Phe 50	Ser	Glu	Ser	Glu	Glu	Lys 55	Leu	Ile	Leu	Asp	Leu	His 60	Ser	Arg	Val
Gly 65	Asn	Arg	Trp	Ser	Lys 70	Ile	Ala	Ser	Phe	Leu 75	Pro	Gly	Arg	Thr	Asp 80
Asn	Glu	Leu	Lys 85	Asn	Tyr	Trp	Asn	Thr	His 90	Ile	Lys	Lys	Lys	Leu 95	Lys
Arg	Met	Gly	Leu 100	Asp	Pro	Gly	Asp	Ala 105	Gln	Ala	Ile	Ser	Glu 110	Thr	Leu
Pro	Gln	Pro 115	Ala	Pro	Val	Ala	Glu 120	Asn	Asn	Asp	Val				

```
<210> 2223
<211> 175
<212> PRT
<213> Pinus radiata
```

	<400> 2223															
Met 1	Lys	Gly	Lys	Ser 5	Pro	Gly	His	Asp	Glu 10	Pro	Asp	Arg	Ile	Lys 15	Gly	
Pro	Trp	Ser	20	Glu	Glu	Asp	Ala	Ala 25	Leu	Gln	His	Phe	Val 30	Gln	Lys	
Tyr	Gly	Pro 35	Arg	Asn	Trp	Ser	Leu 40	Ile	Ser	Lys	Ala	Ile 45	Pro	Gly	Arg	
Ser	Gly 50	Lys	Ser	Cys	Arg	Leu 55	Arg	Trp	Cys	Asn	Gln 60	Leu	Ser	Pro	Gln	
Val 65	Glu	His	Arg	Pro	Phe 70	Thr	Pro	Glu	Glu	Asp 75	Ala	Thr	Ile	Val 80	Arg	
Ala	His	Ala	Gln	His 85	Gly	Asn	Lys	Trp	Ala 90	Thr	Ile	Ala	Arg	Met 95	Leu	
Ser	Gly	Arg	Thr 100	Asp	Asn	Ala	Ile	Lys 105	Asn	His	Trp	Asn	Ser 110	Thr	Leu	
Arg	Arg	Arg 115	Cys	Gln	Gly	Gly	Gly 120	Ala	Leu	Val	Ile	Asp 125	Asp	Glu	Ile	
Ser	Ser 130	Gly	Ala	Asp	Gly	Phe 135	Arg	Lys	Arg	Asn	Leu 140	Ser	Glu	Asp	Ala	
Asp 145	Ala	Ser	Arg	Lys 150	Phe	Lys	Lys	Leu	Ser	Leu 155	Gly	Thr	Thr	Thr 160	Thr	
Thr	Thr	Thr	Thr 165	Glu	Pro	Ser	Thr	Ser	Ser 170	Ala	Ser	Asp	Arg	Ser 175		

<210> 2224
<211> 103

<212> PRT

<213> Pinus radiata

<400> 2224

```

Met Ser Ser Arg Ser Cys Ser Leu Cys Gly Leu Asn Gly His Asn Ser
 1           5           10           15
Arg Thr Cys Val Gly Ser Gly Val Met Leu Phe Gly Val Arg Leu Thr
      20           25           30
Asp Gly Pro Met Arg Lys Ser Ala Ser Met Asn Asn Leu Ser Asn Leu
      35           40           45
Ser Gln Tyr Glu His Ser Asp Pro Ala Glu Val Ala Ala Glu Gly Phe
      50           55           60
Asp Gly Tyr Val Ser Asp Asp Leu Val His Ser Ser Ser Asn Ala Arg
65           70           75           80
Glu Arg Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe
      85           90           95
Leu Val Gly Leu Gln Arg Val
      100

```

<210> 2225

<211> 96

<212> PRT

<213> Pinus radiata

<400> 2225

```

Met Ser Ser Arg Ser Cys Ser Leu Cys Gly Leu Asn Gly His Asn Ser
 1           5           10           15
Arg Thr Cys Val Gly Ser Gly Val Met Leu Phe Gly Val Arg Leu Thr
      20           25           30
Asp Gly Pro Met Arg Lys Ser Ala Ser Met Asn Asn Leu Ser Asn Leu
      35           40           45
Ser Gln Tyr Glu His Ser Asp Pro Ala Glu Val Ala Ala Glu Gly Phe
      50           55           60
Asp Gly Tyr Val Ser Asp Asp Leu Val His Ser Ser Ser Asn Ala Arg
65           70           75           80
Glu Arg Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe
      85           90           95

```

<210> 2226

<211> 131

<212> PRT

<213> Pinus radiata

<400> 2226

```

Arg Gly Arg Val Gln Leu Arg Arg Ile Glu Asn Lys Ile Ser Arg Gln
 1           5           10           15
Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Met Lys Lys Ala Ala Glu
      20           25           30
Leu Ser Ile Leu Cys Asp Ala Glu Val Ala Leu Ile Val Phe Ser Asn
      35           40           45
Lys Asp Lys Leu Tyr Glu Phe Ala Ser Ser Ser Met Thr Lys Ile Leu
      50           55           60
Glu Arg Tyr Arg Lys Arg Ser Asn Leu Ile Gln Asp Ile Gly Lys Asp
65           70           75           80
Pro Gln Asn Ser Asp Ile Glu Leu Thr Arg Leu Lys Glu Glu Val Asp
      85           90           95
Arg Leu Gln Arg Ser Arg Arg His Leu Leu Gly Glu Asp Leu His Gln
      100           105           110
Leu Gly Ala Thr Asp Leu Gln His Leu Glu Gln Gln Leu Glu Glu Ala
      115           120           125
Leu Gln Lys

```

130

<210> 2227
 <211> 49
 <212> PRT
 <213> Pinus radiata

<400> 2227
 Met Pro Ser Ile Met Glu Lys Gln Asn Ser Gly Glu Asp Ser Asp Ser
 1 5 10 15
 Lys Gly Gln Leu Asp Asn Gly Lys Tyr Val Arg Tyr Thr Asn Glu Gln
 20 25 30
 Val Glu Thr Leu Glu Arg Ala Tyr Asn Glu Cys Ser Lys Pro Ser Thr
 35 40 45
 Arg

<210> 2228
 <211> 128
 <212> PRT
 <213> Pinus radiata

<400> 2228
 Lys Ile Glu Asn Thr Thr Ser Arg Gln Val Thr Phe Cys Lys Arg Lys
 1 5 10 15
 Asn Gly Leu Leu Lys Lys Ala Tyr Glu Leu Ser Leu Leu Cys Asp Ala
 20 25 30
 Glu Val Ala Leu Leu Ile Phe Ser Thr Ser Gly Arg Leu Tyr Glu Phe
 35 40 45
 Ala Asn Lys Ser Val Ser Ala Thr Thr Glu Arg Tyr Met Arg Thr Tyr
 50 55 60
 Ala Glu Asn Met Pro Gln Ser Arg Ala Leu Tyr Pro Asp Cys His His
 65 70 75 80
 Trp Gln Glu Glu Val Arg Lys Leu Thr Gln Gln Arg Asp Ser Leu Thr
 85 90 95
 Asn Ser Ile Arg Gln Ile Met Gly Glu Gly Leu Glu Ser Leu Ser Met
 100 105 110
 Lys Glu Leu Lys His Ile Gln Val Gln Leu Glu Lys Ser Ile Ser Cys
 115 120 125

<210> 2229
 <211> 181
 <212> PRT
 <213> Pinus radiata

<400> 2229
 Glu Asp Leu Asp Asp Cys Ile His Pro Pro Glu Lys Lys Arg Arg Leu
 1 5 10 15
 Thr Ala Asp Gln Val Gln Phe Leu Glu Arg Ser Phe Glu Ile Glu Asn
 20 25 30
 Lys Leu Glu Pro Glu Arg Lys Ile Gln Leu Ala Lys Glu Leu Gly Leu
 35 40 45
 Gln Pro Arg Gln Val Ala Val Trp Phe Gln Asn Arg Arg Ala Arg Trp
 50 55 60
 Lys Thr Lys Gln Leu Glu Arg Asp Tyr Asp Ile Leu Lys Ser Arg Tyr
 65 70 75 80
 Glu Asn Leu Arg Val Asp Tyr Asp Ser Leu Lys Glu Lys Asp Lys
 85 90 95
 Leu Arg Ala Glu Val Thr Phe Leu Thr Asp Lys Leu His Asp Ser Asp
 100 105 110
 His Glu Ala Leu Thr Lys Asp Ser Glu Ser Ala Asp Lys Lys Val Tyr

```

      115      120      125
Pro Gln Pro Ala Ser His Ser Asp Cys Val Gly Glu Pro Glu Arg Ser
      130      135      140
Thr Ala Ala Lys Asp Thr Pro Pro Gly Cys Lys His Glu Asp Leu Leu
145      150      155      160
Ser Ser Gly Thr Asp Ser Ser Gly Val Leu Asp Glu Asp Ser Pro His
      165      170      175
His Val Asp Cys Gly
      180

```

<210> 2230
 <211> 107
 <212> PRT
 <213> Pinus radiata

```

      <400> 2230
Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1      5      10      15
Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
      20      25      30
Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
      35      40      45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
50      55      60
Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Val Ile Lys
65      70      75      80
Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
      85      90      95
Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr
      100      105

```

<210> 2231
 <211> 125
 <212> PRT
 <213> Pinus radiata

```

      <400> 2231
Lys Lys Gly Val Pro Trp Thr Glu Glu Glu His Arg Gln Phe Leu Met
 1      5      10      15
Gly Leu Arg Lys Tyr Gly Lys Gly Asp Trp Arg Ser Ile Ser Arg Asn
      20      25      30
Phe Val Val Ser Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
      35      40      45
Tyr Tyr Ile Arg Leu Gly Ser Asp Asn Lys Asn Lys Arg Arg Ser Ser
50      55      60
Ile His Asp Ile Thr Thr Val His Gly Thr Asp Arg Met Pro Ser Pro
65      70      75      80
Leu Leu His Val Ser Asn Arg Gln Thr Asn Ser Pro Ser Thr Gln Ala
      85      90      95
Glu Met Asn His Ser Pro Cys Leu Asp Ile Ser Ile Ser Asp Phe Thr
      100      105      110
Arg Thr Ser Asn Lys Leu Phe Gly Thr Ser Asn Arg Trp
      115      120      125

```

<210> 2232
 <211> 150
 <212> PRT
 <213> Pinus radiata

```

      <400> 2232
Met Thr Arg Lys Cys Ser His Cys Gly Asn Asn Gly His Asn Ser Arg

```

```

      1           5           10           15
Thr Cys Pro Asn Arg Gly Gly Val Lys Leu Phe Gly Val Arg Leu Thr
      20           25           30
Asp Gly Pro Ile Arg Lys Ser Ala Ser Met Gly Asn Leu Met Met Met
      35           40           45
Ser Asn Pro Ser Ser Pro Ala Asp Pro Ser Glu Pro Ala Ser Ala Ala
      50           55           60
Ala Ala Ala Ala Ala Ala Ala Ala Ser Gly Tyr Leu Ser Asp Gly Leu
      65           70           75           80
Val Glu Ala Ser Thr Ser Ser Asn Ser Arg Glu Arg Lys Lys Gly Val
      85           90           95
Pro Trp Thr Glu Glu Glu His Arg Met Phe Leu Leu Gly Leu Gln Lys
      100          105          110
Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asn Phe Val Ile Thr
      115          120          125
Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr Phe Ile Arg
      130          135          140
Gln Ser Asn Met Thr Arg
      145          150

```

<210> 2233
 <211> 102
 <212> PRT
 <213> Pinus radiata

```

      <400> 2233
Met Lys Met Ser Leu Pro Ser Asn Val Leu Thr Leu Ser Ala Asp Ser
      1           5           10           15
Asn Ser Asn Ser Asn Ser Ile Ser Ser Gly Asp Glu Leu Ala Ala
      20           25           30
Lys Val Arg Lys Pro Tyr Thr Ile Thr Lys Gln Arg Glu Arg Trp Ser
      35           40           45
Glu Asp Glu His Leu Lys Phe Leu Glu Ala Leu Lys Met Tyr Gly Arg
      50           55           60
Ala Trp Arg Arg Ile Glu Glu His Ile Gly Thr Lys Thr Ala Val Gln
      65           70           75           80
Ile Arg Ser His Ala Gln Lys Phe Phe Ser Lys Leu Val Arg Gly Ser
      85           90           95
Ser Asn Lys Gly Val Ser
      100

```

<210> 2234
 <211> 85
 <212> PRT
 <213> Pinus radiata

```

      <400> 2234
Gly Ile Asp Met Asn Arg Gly Pro Ala Thr Asn Glu Ser Glu Tyr Ser
      1           5           10           15
Ser Val Phe Gln Ala Asp Ala Leu Arg Thr Ile Asp Thr Gly Ser Val
      20           25           30
Val Val Lys Arg Glu Arg Glu Arg Thr Phe Glu Leu Glu Ala Glu Arg
      35           40           45
Asp Arg Thr Cys Asp Val Ser Ser Arg Thr Ser Asp Glu Glu Glu Ile
      50           55           60
Gly Ser Thr Arg Lys Lys Leu Arg Leu Ser Lys Glu Gln Ser Ala Leu
      65           70           75           80
Leu Glu Glu Ser Phe
      85

```

<210> 2235

<211> 115
 <212> PRT
 <213> Pinus radiata

<400> 2235
 Asn Leu Glu Ser Leu Thr Leu Lys Glu Leu Gln Gln Leu Glu Lys Gln
 1 5 10 15
 Leu Gly Arg Ala Ile Lys Lys Ile Tyr Asn Lys Lys Met Lys Ile Ile
 20 25 30
 Ser Gln Cys Cys Lys Ser Leu Ser Glu Lys Val Arg Ser Leu Glu Glu
 35 40 45
 Glu Asn Ser Glu Leu Leu Thr Lys Leu Ile Pro Arg Ala Asp Ser Ser
 50 55 60
 Thr Ser Gly Ala Ala Leu Phe Val Asp Thr Ser Met Pro Lys Ser His
 65 70 75 80
 Ser Ala Thr Glu Ala Trp Arg Gln Leu Leu Gln Arg Val Leu Val Thr
 85 90 95
 Ala Ala Lys Met Ala Thr Thr Pro Pro Ala Arg His Ser Asn Ser Arg
 100 105 110
 Pro Asn His
 115

<210> 2236
 <211> 88
 <212> PRT
 <213> Pinus radiata

<400> 2236
 Gly Lys Ala Thr Ser Gly Ser Ala Asn Glu Ala Met Ser Gln Ser Gly
 1 5 10 15
 Asp Ser Gly Ser Asp Gly Ser Ser Glu Gly Ser Glu Glu Tyr Asn Thr
 20 25 30
 Gln Thr Glu Ser Gln Val Ala Arg Lys Arg Ser Phe Asp Gln Met Ile
 35 40 45
 Val Asp Gly Ala Asn Ala Gln Ser Thr Asn Ile Gln Ser Tyr Asn Ser
 50 55 60
 Gln Ala Gly Glu Pro Tyr Val Thr Ser Gly Gly His Ala Met Gly Asn
 65 70 75 80
 Pro Ile Ser Gln Ala Val Ala Ala
 85

<210> 2237
 <211> 66
 <212> PRT
 <213> Pinus radiata

<400> 2237
 Gln Leu Lys Trp Lys Glu Arg Ile Leu Thr Glu Glu Asn Leu Phe Leu
 1 5 10 15
 Arg Lys Lys Cys Gly Asp Glu His Val Asp Cys Ser Ala Phe Arg Thr
 20 25 30
 Pro Pro Ala Gln Leu Arg Ser Ile Gln Asn Ile Asp Val Glu Thr Gln
 35 40 45
 Leu Val Ile Arg Pro Pro Thr Val Gln Gln His Pro Asp Val Asp Ser
 50 55 60
 Pro Arg
 65

<210> 2238
 <211> 176
 <212> PRT

<213> Pinus radiata

<400> 2238

```

Met Gly Arg Thr Pro Cys Cys Leu Lys Val Gly Leu Asn Arg Gly Pro
 1      5      10      15
Trp Thr Pro Glu Asp Leu Cys Leu Ser Asn Tyr Ile Glu Ala His
 20      25      30
Gly Glu Gly Gly Trp Arg Thr Leu Pro Lys Lys Ala Gly Leu Leu Arg
 35      40      45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu Arg Pro Asp
 50      55      60
Val Lys His Gly His Ile Leu Pro Glu Glu Glu Asp Leu Ile Leu Arg
 65      70      75      80
Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Met
 85      90      95
Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Thr His Leu
 100     105     110
Ser Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His Lys Pro
 115     120     125
Leu Ser Glu Ser Glu Asp Ile Cys Ser Ser Pro Gly Asn Ser Glu Val
 130     135     140
Ser Arg Lys Ser Gln Arg Glu Asn Asn Ala Glu Ile Pro Arg Lys Val
 145     150     155     160
Ala Asp Gly Ala Val Asp Ile Gln Asp Lys Glu Glu Asp Ile Thr Glu
 165     170     175

```

<210> 2239

<211> 105

<212> PRT

<213> Pinus radiata

<400> 2239

```

Met Gly Arg Gly Lys Ile Glu Ile Lys Met Ile Glu Asn Thr Ala Asn
 1      5      10      15
Arg Gln Val Thr Phe Ser Lys Arg Lys Gly Gly Leu Leu Lys Lys Ala
 20      25      30
His Glu Leu Ser Val Leu Cys Asn Ala Glu Ile Ala Leu Ile Val Phe
 35      40      45
Ser Asn Thr Gly Lys Leu His Asp Trp Ser Ser Ser Ser Met Lys Lys
 50      55      60
Val Met Glu Lys Tyr Gln Lys Ser Asp Gln Gly Leu Gly Leu Met Asp
 65      70      75      80
Tyr Gln Gln Gln Gln Leu Leu Cys Glu Met Lys Arg Ile Thr Lys Glu
 85      90      95
Asn Glu Ser Leu Arg Ala Arg Leu Arg
 100     105

```

<210> 2240

<211> 78

<212> PRT

<213> Pinus radiata

<400> 2240

```

Met Ser Asn Gly Arg Leu Cys Glu Asp Leu Asp Arg Ile Lys Gly Pro
 1      5      10      15
Trp Ser Pro Glu Glu Asp Ala Ser Leu Gln Arg Leu Val Gln Lys Tyr
 20      25      30
Gly Pro Arg Asn Trp Thr Leu Ile Ser Lys Gly Ile Pro Gly Arg Ser
 35      40      45
Gly Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu Ser Pro Gln Val
 50      55      60

```


Glu His Arg Pro Phe Thr Pro Ser Glu Asp Ala Ala Ile Leu
 65 70 75

<210> 2241
 <211> 67
 <212> PRT
 <213> Pinus radiata

<400> 2241
 Met Gly Arg Ala Leu Gly Arg Thr Glu Ile Lys Arg Ile Glu Asn Glu
 1 5 10 15
 Val Ser Arg Asn Val Ser Phe Arg Lys Arg Arg Gly Leu Leu Lys
 20 25 30
 Lys Ala Ala Glu Leu Ser Ile Leu Cys Asp Ala Thr Val Gly Val Val
 35 40 45
 Val Phe Ser Pro Ala Gly Lys Leu Ser Glu Tyr Ala Ser Thr Ser Glu
 50 55 60
 Gln Met Asp
 65

<210> 2242
 <211> 131
 <212> PRT
 <213> Pinus radiata

<400> 2242
 Ile Arg Asn Pro Thr Asn Arg His Ser Ser Phe Tyr Lys Arg Lys Gly
 1 5 10 15
 Gly Leu Leu Lys Lys Ala Phe Glu Leu Ala Val Leu Cys Asp Ala Glu
 20 25 30
 Val Ala Leu Ile Ile Phe Ser Glu Thr Gly Arg Ile Tyr Glu Phe Ala
 35 40 45
 Ser His Asp Asp Val Thr Thr Val Leu Ala Lys Tyr Arg Ile Gln Thr
 50 55 60
 Lys Thr Ala Gly Asn Ala Met Pro Ser Ser Leu Gln Lys Thr Glu Phe
 65 70 75 80
 Asp Gln Leu Gln Val Arg Met Leu Gln Glu Lys Ile Asp Asn Leu Glu
 85 90 95
 Lys Thr Lys Lys His Met Val Gly Asp Asn Leu Glu Ser Leu Thr Trp
 100 105 110
 Lys Glu Leu Gln Gln Val Glu Lys Lys Leu Ser Lys Ala Thr Lys Ile
 115 120 125
 Ile Val Ala
 130

<210> 2243
 <211> 29
 <212> PRT
 <213> Pinus radiata

<400> 2243
 Gln Pro Val Ala Pro Glu Ser Ile Val Pro Pro His Gln Pro Pro His
 1 5 10 15
 Asn Gln Thr Pro Asn Gln Tyr Met Gln Gly Trp Trp Val
 20 25

<210> 2244
 <211> 107
 <212> PRT
 <213> Pinus radiata

<400> 2244

Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Ile Ile Lys
 65 70 75 80
 Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr
 100 105

<210> 2245

<211> 168

<212> PRT

<213> Pinus radiata

<400> 2245

Thr Ala Glu Glu Asp Arg Lys Leu Val Asn Phe Ile Thr Leu His Gly
 1 5 10 15
 His Gly Cys Trp Arg Glu Val Pro Lys Leu Ala Gly Leu Leu Arg Cys
 20 25 30
 Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro Asp Leu
 35 40 45
 Lys Arg Gly Leu Leu Ser Glu Ser Glu Glu Lys Leu Ile Ile Asp Leu
 50 55 60
 His Ala Ala Ile Gly Asn Arg Trp Ser Arg Ile Ala Ala Gln Leu Pro
 65 70 75 80
 Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr Arg Ile Lys
 85 90 95
 Lys Lys Leu Arg Gln Met Gly Ile Asp Pro Val Thr His Lys Pro Leu
 100 105 110
 Thr Gln Met Gln Met Gln Ser Thr Pro Ala Gln Thr Leu Leu Leu Gln
 115 120 125
 Glu Asn Asp Thr Glu Gln Gln Gln Glu Gln His Asn Glu Pro Asp
 130 135 140
 Pro Asp Gln Asn Gln Ser Ser Asn Gly Thr Val Glu Thr Leu Val Ser
 145 150 155 160
 Arg Ala Arg Glu Pro His Asp His
 165

<210> 2246

<211> 164

<212> PRT

<213> Pinus radiata

<400> 2246

Ser Asp Gly Thr Thr Met Ser Thr Tyr Glu Arg Lys Ala Ser Leu
 1 5 10 15
 Arg Glu Phe Tyr Ala Val Ile Tyr Pro Ser Leu Leu Gln Leu Glu Gly
 20 25 30
 Gly Ile Thr Glu Met Glu Asp Asn Lys Gln Lys Leu Ile Cys Lys Glu
 35 40 45
 Arg Tyr Lys Lys Arg Val Asp Glu Glu Arg Arg His Leu Ser Glu Leu
 50 55 60
 Asp Leu Glu Arg Glu Lys Glu Cys Gly Ile Cys Met Glu Thr Gln Thr
 65 70 75 80

Lys Val Val Leu Pro Asn Cys Ser His Ala Met Cys Leu Asn Cys Tyr
 85 90 95
 Arg Glu Trp His Ala Arg Ser Glu Ser Cys Pro Phe Cys Arg Asp Ser
 100 105 110
 Leu Lys Arg Val Asn Ser Thr Asp Leu Trp Ile Phe Thr Ser Asn Glu
 115 120 125
 Glu Val Val Asp Met Glu Thr Leu Gly Arg Glu Asn Leu Lys Arg Leu
 130 135 140
 Phe Asn Tyr Ile Asp Lys Leu Pro Leu Ile Val Pro Glu Ser Leu Phe
 145 150 155 160
 Tyr Val Tyr Asp

<210> 2247
 <211> 414
 <212> PRT
 <213> Eucalyptus grandis

<400> 2247
 Met Gly Arg His Ser Cys Cys Tyr Lys Gln Lys Leu Arg Lys Gly Leu
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Glu Lys Leu Leu Arg His Ile Ser Gln Tyr
 20 25 30
 Gly His Gly Cys Trp Ser Ser Val Pro Lys Gln Ala Gly Leu Gln Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Ala Phe Ser Gln Asp Glu Glu Asp Leu Ile Ile Glu
 65 70 75 80
 Leu His Ala Ala Leu Gly Asn Lys Trp Ser Gln Ile Ala Ala Asn Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Leu Trp Asn Ser Cys Leu
 100 105 110
 Lys Lys Lys Leu Arg Gln Arg Gly Ile Asp Pro Val Ser His Arg Pro
 115 120 125
 Leu Ser Glu Val Glu Asn Ser Asp Asp Lys Asp Ala Thr Ser Gly Gln
 130 135 140
 Thr Gln Asp Lys Val Ser Arg Gly Ser Val Glu Leu Leu Ser Gln Leu
 145 150 155 160
 Asn Pro Gln Phe Ser Ser Ser Thr Thr Ala Arg Ser Ser Lys Asn Ser
 165 170 175
 Asn Leu Met Ala Pro Thr Leu Ser Lys Asp Thr Val Ala Asp Gly Phe
 180 185 190
 Val Ser Asn His Gln Glu Asn Ser Met Met Asn Ser Cys Ile Ser Asp
 195 200 205
 Phe Val Asp Asn Phe Ser Leu Gln Gln Leu Asn Tyr Ser Ser Ser Asp
 210 215 220
 Ser Arg Phe Ser Asn Leu Cys Phe Thr Gln Thr Gly Arg Ala His Gly
 225 230 235 240
 Asn Thr Ile Phe Ser Asp Phe Asn Ser Asn Val Ile Ser Ala Ile Ser
 245 250 255
 Pro Pro Ser Ser Asn Ser Leu Phe Pro Thr Ala Ser Met Gly Phe Asn
 260 265 270
 Phe Lys Pro Ser Asn Ala Val Pro Ser Ala Asn Ser Thr Ser Ser Ala
 275 280 285
 Ser Thr Gly Thr Ala Asp Phe His Asn Ser Gly Ser Tyr Phe Gly Asn
 290 295 300
 Ser Leu Val Ser Trp Gly Leu Leu Ala Asp Cys Gly Ser Pro Asp Lys
 305 310 315 320
 Glu Gly Ser Thr Ser Ile His Pro Leu Glu Val His Gln Pro Gly Asp
 325 330 335

Phe Lys Trp Ala Ala Glu Tyr Leu Gln Asn Pro Leu Phe Met Ala Ala
 340 345 350
 Ala Leu Gln Asn Gln Ala Gln Glu Gln Ser Asn Leu Tyr Asn Gln Ile
 355 360 365
 Lys Pro Glu Thr Gln Phe Pro Pro Asp His Ser Thr Thr Ser Met Trp
 370 375 380
 Asp His Leu Gln Gly His Glu Ser Leu Asp Asn Ser Leu Asn Thr Cys
 385 390 395 400
 Gly Lys Asp Ile Gln Arg Leu Thr Ala Leu Leu Gly His Asn
 405 410

<210> 2248
 <211> 205
 <212> PRT
 <213> Eucalyptus grandis

<400> 2248
 Met Arg Tyr Pro Ala Pro Ala Ser Arg Gly Lys Ser Thr Ser
 1 5 10 15
 Thr Ala Thr Pro Cys Cys Ser Lys Val Gly Ile Lys Arg Gly Pro Trp
 20 25 30
 Thr Pro Glu Glu Asp Glu Val Leu Ala Ser Tyr Val Arg Arg Glu Gly
 35 40 45
 Glu Gly Arg Trp Arg Thr Leu Pro Lys Arg Ala Gly Leu Gln Arg Cys
 50 55 60
 Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu Arg Pro Ser Val
 65 70 75 80
 Lys Arg Gly Gln Ile Ala Pro Asp Glu Glu Asp Leu Ile Leu Arg Leu
 85 90 95
 His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Ile Pro
 100 105 110
 Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Leu Ser
 115 120 125
 Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His Lys Pro Leu
 130 135 140
 Leu Asn His Asn Pro Ser Ser Ser Leu Ala Ala His Leu Gln Asp Thr
 145 150 155 160
 Tyr Asn Ala Ser Thr Phe Thr Pro Lys Ala Thr Tyr Pro Asn Pro Thr
 165 170 175
 Val Pro Val Glu Glu Thr Gly Asp Glu Asn Asp Leu Lys Val Gly Arg
 180 185 190
 Gln Pro Ala Gly Ser Ala Ser Lys Arg Gly Arg Cys Gln
 195 200 205

<210> 2249
 <211> 195
 <212> PRT
 <213> Eucalyptus grandis

<400> 2249
 Met Asp Lys Lys Pro Asp Asp Asp Ser Gly Lys Ser Gln Asp Val Glu
 1 5 10 15
 Val Arg Lys Gly Pro Trp Thr Met Glu Glu Asp Leu Ile Leu Ile Asn
 20 25 30
 Tyr Ile Ala Asn His Gly Glu Gly Ser Trp Asn Ser Leu Ala Lys Ala
 35 40 45
 Ala Gly Leu Lys Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn
 50 55 60
 Tyr Leu Arg Pro Asp Val Arg Arg Gly Asn Ile Thr Thr Glu Glu Gln
 65 70 75 80
 Leu Leu Ile Met Glu Leu His Ala Lys Trp Gly Asn Arg Trp Ser Lys

```

      85              90              95
Ile Ala Lys His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Phe
      100              105              110
Trp Arg Thr Arg Ile Gln Lys His Ile Lys Gln Ala Glu Ala Phe Ser
      115              120              125
Gly Gln Ser Ser Glu Met Ser Asp Gln Ala Ser Thr Ser His Met Ser
      130              135              140
Ser Met Pro Glu Pro Met Glu Thr Tyr Asp Ser Pro Pro Ser Phe Gln
      145              150              155              160
Gly Asn Asn Asn Met Glu Pro Leu Pro Val Asn Leu Ser Val Glu Ser
      165              170              175
Asn Glu Ala Tyr Trp Ser Met Asp Asp Leu Trp Ser Met Gln Leu Leu
      180              185              190
Asn Gly Asp
      195

```

```

<210> 2250
<211> 208
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2250
Met Asp Lys Lys Pro Cys Tyr Arg Thr Gln Asp Pro Gln Val Arg Lys
  1      5      10      15
Gly Pro Trp Thr Leu Glu Glu Asp Leu Ile Leu Met Asp Tyr Ile Ala
      20      25      30
Asn His Gly Glu Gly Val Trp Asn Ser Leu Ala Lys Ala Ala Gly Leu
      35      40      45
Gln Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu Arg
      50      55      60
Pro Asp Val Arg Arg Gly Asn Ile Thr Pro Glu Glu Gln Leu Leu Ile
      65      70      75      80
Ile His Leu Gln Ser Met Trp Gly Asn Arg Trp Ser Glu Ile Ala Lys
      85      90      95
His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Arg Thr
      100      105      110
Lys Ile Gln Lys His Ile Ile Lys Gln Ser Glu Thr Glu Ile Asn Asp
      115      120      125
Leu Thr Ile Pro Pro Ser Ser Ala Asn Ala Cys Thr Asp His Arg Gly
      130      135      140
Val Ser Ala Ala Asn Thr Ile Glu Ile Ala Cys Ser Pro Pro Ser Asp
      145      150      155      160
Gln Gly Gly Ser Gly Glu Thr Met Leu Ser Ala Leu Pro Pro Ala Gln
      165      170      175
Glu Pro Asn Asp Ser Ala Cys Trp Ser Val Glu Asp Leu Trp Pro Ile
      180      185      190
Gln Ser Leu Ile Ser Gly Met Gly Asp Asp Ala Gln Tyr Tyr Ser Val
      195      200      205

```

```

<210> 2251
<211> 147
<212> PRT
<213> Eucalyptus grandis

```

```

      <400> 2251
Met Asn Ser Thr Thr Thr Gln Phe Val Ser Ser Arg Arg Met Gly Met
  1      5      10      15
Tyr Asp Pro Ile His Gln Ile Gly Met Trp Asp Glu Asn Phe Lys Gln
      20      25      30
Asn Gly Asn Pro Asn Ala Pro Pro Ala Leu Ile Ile Pro Met His Ala
      35      40      45

```

Asn Leu Asp Asn Gln Ser Glu Asp Thr Ser His Gly Ser Gln Asp Thr
 50 55 60
 Ala Gly Lys Tyr Glu Gln Glu Thr Ser Lys Pro Tyr Asp Lys Val Gln
 65 70 75 80
 Arg Arg Leu Ala Gln Asn Arg Glu Ala Ala Arg Lys Ser Arg Leu Arg
 85 90 95
 Lys Lys Ala Tyr Val Gln Gln Leu Glu Ala Ser Arg Leu Lys Leu Met
 100 105 110
 Gln Leu Glu Gln Glu Val Asp Arg Ala Arg Gln Gln Gly Val Tyr Met
 115 120 125
 Ala Ser Gly Val Asp Ser Ala Tyr Pro Gly Tyr Gly Gly Cys Leu Asn
 130 135 140
 Ser Gly Ile
 145

<210> 2252
 <211> 43
 <212> PRT
 <213> Eucalyptus grandis

<400> 2252
 Met Met Ala Val Thr Ser Ala Cys Lys Asp Lys Met Gly Ile Asp Asn
 1 5 10 15
 Gly Lys Tyr Val Arg Tyr Thr Pro Glu Gln Val Glu Ala Leu Glu Arg
 20 25 30
 Leu Tyr His Glu Cys Pro Lys Pro Ser Ser Leu
 35 40

<210> 2253
 <211> 54
 <212> PRT
 <213> Pinus radiata

<400> 2253
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Gln Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
 20 25 30
 Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly Cys Leu Pro
 35 40 45
 Ala Leu Cys Phe Leu Asn
 50

<210> 2254
 <211> 66
 <212> PRT
 <213> Pinus radiata

<400> 2254
 Met Gly Arg Ala Pro Cys Cys Glu Lys Val Gly Leu Lys Lys Gly Pro
 1 5 10 15
 Trp Thr Pro Glu Glu Asp Gln Lys Leu Val Thr Tyr Ile Gln Glu His
 20 25 30
 Gly His Gly Ser Trp Arg Ala Leu Pro Gln Lys Ala Gly Asp Tyr Glu
 35 40 45
 Phe Ile Phe Ser Ser Arg Thr Cys Lys Lys Phe Ser Val Phe Leu Phe
 50 55 60
 Phe Gly
 65

<210> 2255

<211> 67
 <212> PRT
 <213> Pinus radiata

<400> 2255
 Met Gly Arg Ser Pro Cys Cys Ala Lys Glu Gly Leu Asn Arg Gly Ala
 1 5 10 15
 Trp Thr Lys Thr Glu Asp Ile Ile Leu Ser Glu Tyr Ile Arg Ile His
 20 25 30
 Gly Asp Gly Gly Trp Arg Ser Leu Pro Lys Lys Ala Gly Leu Lys Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu Arg Pro Asp
 50 55 60
 Ile Lys Arg
 65

<210> 2256
 <211> 226
 <212> PRT
 <213> Pinus radiata

<400> 2256
 Met Gly Arg Ala Pro Cys Cys Ser Asn Asp Asp Arg Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Gln Tyr Ile Lys Val His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Phe Phe Ser Glu Asp Glu Asp Asp Leu Ile Leu Lys
 65 70 75 80
 Leu His Ala Leu Leu Gly Asn Asn Arg Trp Ser Leu Ile Ala Gly Arg
 85 90 95
 Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Ser His
 100 105 110
 Leu Lys Arg Lys Leu Ile Ser Met Gly Ile Asp Pro Leu Thr His Arg
 115 120 125
 Pro Phe Gln Lys Thr Ser His His His Pro Ser Pro Pro Gln Asn Val
 130 135 140
 Arg Glu Ala Glu Thr Thr Pro Ser Ile Gly Ile Val Gln Asp Phe Phe
 145 150 155 160
 Arg Cys Pro Ser Glu Leu Ser Thr Lys Ser Glu Gln Ile Ser Asp Ala
 165 170 175
 Ala Ser Gly Leu Ala Gln Asp Glu Gln Pro His Pro Asn Leu Asn Leu
 180 185 190
 Asn Leu Glu Leu Ser Ile Ala Arg Ser Ser Val His Arg Val Ala Glu
 195 200 205
 Lys Glu Asp Val Val Asn Ser Gln Gln Gly Glu Ser Asn Leu Ser Glu
 210 215 220
 Gly Lys
 225

<210> 2257
 <211> 101
 <212> PRT
 <213> Pinus radiata

<400> 2257
 Met Gly Arg Ala Pro Cys Cys Ser Asn Gly Asp Arg Asn Lys Gly Ala
 1 5 10 15

Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Gln Tyr Ile Lys Val His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Asn Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Cys Pro Asp
 50 55 60
 Leu Lys Arg Gly Phe Phe Ser Glu Asp Glu Asp Asp Leu Ile Leu Lys
 65 70 75 80
 Leu His Ala Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp
 100

<210> 2258

<211> 412

<212> PRT

<213> Pinus radiata

<400> 2258

Met Gly Arg Thr Pro Cys Cys Glu Lys Asn Ile Gly Leu Lys Lys Gly
 1 5 10 15
 Pro Trp Thr Pro Glu Glu Asp Gln Lys Leu Ile Asp Tyr Ile Gln Ser
 20 25 30
 His Gly His Gly Ser Trp Arg Ala Leu Pro Lys Arg Ala Gly Leu Leu
 35 40 45
 Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu Arg Pro
 50 55 60
 Asp Ile Lys Arg Gly Gln Phe Ser Phe Glu Glu Glu Gln Thr Ile Ile
 65 70 75 80
 Glu Leu His Ala Val Leu Gly Asn Lys Trp Ser Thr Ile Ala Gly His
 85 90 95
 Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His
 100 105 110
 Leu Lys Lys Arg Leu Leu Gln Met Gly Ile Asp Pro Val Thr His Arg
 115 120 125
 Pro Arg Thr Asp Leu Leu Ala Phe Ser Asn Ile Gln Ser Ser Ile Phe
 130 135 140
 Asn Thr Pro Gly Phe Gly His Met Ala Gln Trp Glu Ser Ala Arg Leu
 145 150 155 160
 Glu Ala Glu Ala Arg Leu Thr Gly Glu Tyr Leu Arg Gln Ala Leu Phe
 165 170 175
 Met Ala Gly Asn Gly Ser Ala Thr Ala Asp Leu Leu Met Arg Pro Cys
 180 185 190
 Lys Ser Glu Phe Gly Asn Asp Gln Phe Asn Leu Thr Lys Asn Met Gly
 195 200 205
 Asn Pro Pro Trp Ile Gln Gln Pro Gly Met Ala Leu Asp Tyr Lys Gly
 210 215 220
 Ala Val Pro Gln Ser Leu Glu Gln Phe Leu Gln Thr Asn Val Cys Ser
 225 230 235 240
 Ala Ser Asp Ile Asn Gly Gly Gly Cys Leu Ser His Glu Gly Gly Phe
 245 250 255
 Asn Ile Thr Lys Phe Ala Ser Pro Cys Ser Thr Leu Asp Gly Ile Gln
 260 265 270
 Ile Lys Thr Glu Pro Gln Ser Leu Cys Gly Pro Gln Val Val Lys Asn
 275 280 285
 Asp Ser Gln Phe Leu His Ser Glu Gly Asp Leu Arg Lys Gln Ala Met
 290 295 300
 Leu Asp Met Asn Val Gly Cys Asn Val Leu Ile Asn Met Asn Ala Glu
 305 310 315 320
 Ser Lys Val Ser Phe Gly His Asn Gly Ile Ile Thr Asp Gln Glu Tyr
 325 330 335


```

Asn Asn Leu Gly Gln Ile Asp Asn Asn Asn His Leu Ser His Ala Ala
      340                      345                      350
Thr Thr Leu Trp Pro Val Glu Gly Gln Leu Gln Ala Ile Ala Ser Ala
      355                      360                      365
Ser Met Pro Gly Leu Ile Ser Ser Thr Ser Cys Thr Ser Asn Asn Ile
      370                      375                      380
Tyr Ser Gln Pro Gly Leu Ile Pro Leu Leu Asn Ser Thr Thr Ser Ser
385                      390                      395                      400
Met Gly Asp Thr Asn Ser Tyr Arg Glu Ala Gln Pro
      405                      410

```

<210> 2259

<211> 391

<212> PRT

<213> Pinus radiata

<400> 2259

```

Met Gly Arg Thr Pro Cys Cys Leu Lys Val Gly Leu Asn Arg Gly Pro
 1      5      10      15
Trp Thr Pro Glu Glu Asp Leu Cys Leu Ser Asn Tyr Ile Glu Ala His
      20      25      30
Gly Glu Gly Gly Trp Arg Thr Leu Pro Lys Lys Ala Gly Leu Leu Arg
      35      40      45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu Arg Pro Asp
50      55      60
Val Lys His Gly His Ile Leu Pro Glu Glu Glu Asp Leu Ile Leu Arg
65      70      75      80
Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly Arg Met
      85      90      95
Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Thr His Leu
      100      105      110
Ser Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His Lys Pro
      115      120      125
Leu Ser Glu Ser Glu Asp Ile Cys Ser Ser Pro Gly Asn Ser Glu Val
130      135      140
Ser Arg Lys Ser Gln Arg Glu Asn Asn Ala Glu Ile Pro Arg Lys Val
145      150      155      160
Ala Asp Gly Ala Val Asp Ile Gln Asp Lys Glu Glu Asp Ile Thr Glu
      165      170      175
Asp Gln Thr Ser Ala Gln Leu Pro Glu Asn Gln Leu Leu Glu Thr Ser
      180      185      190
Asn Ser Gln Cys Pro Ser Val Ala Thr Asp Phe Val Pro Gln Ala Pro
195      200      205
Ser Ile Pro Ser Thr Ala Tyr Ser Phe Gln Gln Ser Thr Thr Ser Ser
210      215      220
Val Pro Gly Gly Val Ser Asp Ser Val Asp Val Asn His Asn Lys Gly
225      230      235      240
Ser Lys Gln Val Pro Phe Pro Leu Ser Asn Thr Ala Cys Phe Asn Ser
      245      250      255
Ser Ala Gln Gly Val Ala Gly Asp Tyr Leu Asp Gln Tyr Leu Met Lys
      260      265      270
Asn Leu Val Thr Asn Ser Asn Asp Leu Ile Thr Ser Thr Val Arg Leu
      275      280      285
Ser Ser Ala Leu Gln Thr Ala Pro Phe Val Gly Gln Phe Asp Ser Asn
290      295      300
His Val Phe Met Ser Gly Asn Ala Ser Leu Asn Glu Lys His Gln Met
305      310      315      320
Pro Gln Asn Ser Gln Ala Leu Glu Met Asp Pro His His Ser Phe Ile
      325      330      335
Ala His Pro Ser Glu Glu Gly Thr Tyr Asp Lys Leu Asn His Thr Arg
      340      345      350

```

Cys Ala Ala Ser Asp Gln Val Thr Ser Phe Asn Tyr Pro Tyr Leu Ile
 355 360 365
 Ser His Thr Val Thr Gly Ser Ala Leu Gly Asp Phe Asn Pro Asp Ile
 370 375 380
 Phe Pro Pro Phe Val Glu Ser
 385 390

<210> 2260
 <211> 144
 <212> PRT
 <213> Pinus radiata

<400> 2260
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Gln Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
 20 25 30
 Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Ser Phe Thr Glu Glu Glu Asp Glu Leu Ile Ile Lys
 65 70 75 80
 Leu His Ser Phe Val Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Ile
 100 105 110
 Lys Arg Lys Leu Leu Ser Lys Gly Leu Asp Pro Gln Thr His Arg Pro
 115 120 125
 Leu Gly Gln Pro Asn Asn Thr Pro Val Thr Arg Pro Val Leu Glu His
 130 135 140

<210> 2261
 <211> 255
 <212> PRT
 <213> Pinus radiata

<400> 2261
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Val Ile Lys
 65 70 75 80
 Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Ile
 100 105 110
 Lys Arg Lys Leu Leu Asn Arg Gly Leu Asp Pro Gln Ser His Arg Pro
 115 120 125
 Leu Gly Gln Pro His Asn Ser Asn Thr Thr Cys Pro Ser Leu Pro Ala
 130 135 140
 Leu Glu His Glu Ile Leu Val Phe Gln Arg Pro Arg Thr Pro Glu Ile
 145 150 155 160
 Ala Asp Phe Phe Gln Tyr Glu Arg Ser Glu Ser Ser Pro Met Glu Pro
 165 170 175
 Ala Thr Ser Lys Asp Ala Glu Glu His Pro Asp Leu Asn Leu Asp Leu

			180					185				190			
Cys	Ile	Ser	Leu	Pro	Val	His	Ser	Pro	Pro	Ala	Thr	Ser	Arg	Ala	Ser
		195						200				205			
Ser	Val	Asp	Gly	Thr	Val	Asp	Ser	Lys	Pro	Asn	Ser	Val	Ser	Cys	His
	210					215					220				
Met	Gly	Leu	Gln	Val	Asn	Tyr	Gly	Val	Gln	Cys	Glu	Asn	Arg	Tyr	Cys
225					230					235					240
Glu	Glu	Ser	Ala	Ser	Gly	Val	Ser	Ser	Phe	Tyr	Thr	Leu	Val	Leu	
				245					250					255	

<210> 2262
 <211> 162
 <212> PRT
 <213> Pinus radiata

<400> 2262

Met	Gly	Thr	Gly	Glu	Met	Gly	Thr	Pro	Ala	Lys	Thr	Thr	Lys	Ala	Ser
1				5					10					15	
Thr	Pro	Gln	Glu	Gln	Pro	Pro	Thr	Ser	Thr	Ala	Met	Leu	Tyr	Pro	Asp
		20						25					30		
Trp	Ala	Ala	Ala	Phe	Gln	Ala	Tyr	Tyr	Asn	Ser	Gly	Thr	Thr	Pro	Pro
	35						40					45			
Pro	Pro	Pro	Ala	Tyr	Phe	His	Ser	Ser	Val	Ala	Ser	Ser	Pro	Gln	Pro
	50					55					60				
His	Pro	Tyr	Met	Trp	Gly	Gly	Gln	Pro	Leu	Met	Pro	Pro	Tyr	Gly	Thr
65					70					75				80	
Leu	Pro	Pro	Pro	Tyr	Ala	Ala	Met	Tyr	His	His	Gly	Ser	Met	Tyr	Ala
				85					90					95	
His	Pro	Ser	Met	Pro	Pro	Gly	Ala	His	Pro	Phe	Ala	Pro	Tyr	Val	Met
			100					105					110		
Thr	Ser	Ser	Leu	Ser	Thr	Thr	Glu	Gly	Ala	Pro	Val	Gly	Thr	Thr	Ser
		115					120					125			
Gly	Ala	Asp	Ala	Glu	Gly	Lys	Pro	Ser	Glu	Pro	Lys	Asp	Gln	Thr	Leu
	130					135					140				
Leu	Lys	Arg	Ser	Lys	Gly	Ser	Leu	Gly	Ser	Leu	Asn	Met	Leu	Thr	Gly
145					150					155					160
Lys	Ile														

<210> 2263
 <211> 193
 <212> PRT
 <213> Pinus radiata

<400> 2263

Met	Gly	Cys	Asn	Gln	Ser	Lys	Val	Glu	Ser	Glu	Glu	Glu	Val	Val	Lys
1				5					10					15	
Ser	Lys	Glu	Arg	Lys	Gln	Phe	Met	Lys	Glu	Ser	Val	Ala	Ala	Arg	Asn
		20						25					30		
Ala	Phe	Ala	Ala	Ala	His	Ser	Ala	Ser	Ile	Thr	Ser	Leu	Lys	Asn	Ile
	35						40					45			
Gly	Ala	Ala	Leu	Asn	Asp	Tyr	Gly	Gln	Gly	Glu	Ser	Lys	Glu	Ser	Leu
	50					55					60				
Ser	Gln	Gly	His	Leu	Pro	Val	Pro	His	Ile	Tyr	Gly	Asp	Pro	Leu	Pro
65					70					75				80	
Pro	Ala	Pro	Pro	Leu	Pro	Pro	Leu	Leu	Pro	Pro	Pro	Arg	Pro	Asp	Glu
				85					90					95	
His	Pro	Ala	Arg	Pro	Leu	Glu	Arg	Ser	Ala	Ser	Ala	Pro	Ala	Ile	Ala
			100					105					110		
Leu	Gln	Gln	Gln	Ala	Glu	Glu	Asp	Arg	Asn	Pro	Glu	Ala	Asn	Ala	Gly
		115					120					125			

Ala Ser Ile Pro Glu Gly Glu Glu Asp Glu Val Glu Glu Glu Glu Asp
 130 135 140
 Glu His Leu Val Glu Val Ser His Ser Val Thr Ser Phe Asn Pro Pro
 145 150 155 160
 Pro Arg Pro Pro Pro Ser Ser Ser Glu Pro Pro Pro Pro Leu Pro
 165 170 175
 Pro Leu Thr Asn Gln Trp Asp Phe Phe Asp Asp Asn Ser Tyr Phe Glu
 180 185 190
 Arg

<210> 2264
 <211> 128
 <212> PRT
 <213> Pinus radiata

<400> 2264
 Met Gly Arg Gly Lys Ile Glu Ile Lys Met Ile Glu Asn Ala Thr Asn
 1 5 10 15
 Arg Gln Val Thr Phe Ser Lys Arg Arg Gly Gly Leu Lys Lys Lys Ala
 20 25 30
 Gln Glu Leu Ser Val Leu Cys Asn Ala Glu Val Ala Leu Ile Ile Phe
 35 40 45
 Ser Ser Thr Gly Lys Leu His Glu Trp Ser Ser Ser Ser Ser Phe Phe
 50 55 60
 Met Leu Gln Lys Ser Met Lys Lys Ile Leu Glu Arg Tyr Gln Lys Ser
 65 70 75 80
 Glu Gln Gly Leu Gly Leu Met Asp Tyr Gln His Gln Gln Leu Leu Cys
 85 90 95
 Glu Met Arg Arg Ile Thr Lys Glu Asn Glu Ser Leu Gln Glu Arg Leu
 100 105 110
 Arg His Met Asn Gly Glu Glu Val Asn Ser Leu Lys Leu Pro Glu Leu
 115 120 125

<210> 2265
 <211> 181
 <212> PRT
 <213> Pinus radiata

<400> 2265
 Met Gly Arg Gly Arg Val Glu Leu Lys Arg Ile Glu Asn Lys Ile Asn
 1 5 10 15
 Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
 20 25 30
 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Ile Phe
 35 40 45
 Ser Ser Arg Gly Lys Leu Tyr Glu Phe Gly Ser Ala Gly Met Leu Lys
 50 55 60
 Thr Leu Glu Arg Tyr Gln Lys Cys Ser Tyr Val Leu Gln Asp Ala Thr
 65 70 75 80
 Val Ser Asp Arg Glu Ala Gln Asn Trp His Gln Glu Val Gly Lys Leu
 85 90 95
 Lys Ala Arg Val Glu Leu Leu Gln Arg Ser Gln Arg His Leu Leu Gly
 100 105 110
 Glu Asp Leu Gly Pro Leu Ser Ile Lys Glu Leu Gln Gln Leu Glu Arg
 115 120 125
 Gln Leu Glu Val Ala Leu Thr His Val Arg Ser Arg Lys Thr Gln Val
 130 135 140
 Met Leu Glu Met Met Asp Glu Leu Arg Arg Lys Glu Arg Ile Leu Gln
 145 150 155 160
 Glu Val Asn Lys Ser Leu Arg Lys Lys Leu Gln Glu Ala Glu Gly Gln

165
 Ala Phe Asn Ala Met
 180

170
 175

<210> 2266
 <211> 107
 <212> PRT
 <213> Pinus radiata

<400> 2266
 Met Asp Leu Met Glu Ser Phe Glu Ala Lys Gly Lys Gly Glu Lys Arg
 1 5 10 15
 Arg Thr Val Arg Gly Lys Thr Gln Leu Lys Arg Ile Glu Asn Gly Thr
 20 25 30
 Ser Arg Gln Val Thr Phe Cys Lys Arg Arg Asn Gly Leu Leu Lys Lys
 35 40 45
 Ala Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Val
 50 55 60
 Phe Ser Pro Arg Gly Lys Arg Tyr Glu Phe Ala Asn Pro Ser Met Gln
 65 70 75 80
 Lys Met Leu Ala Arg Tyr Glu Asn Phe Ser Glu Gly Ser Lys Ala Thr
 85 90 95
 Ser Thr Ala Lys Glu Gln Asp Val Gln Gly Leu
 100 105

<210> 2267
 <211> 134
 <212> PRT
 <213> Pinus radiata

<400> 2267
 Ala Arg Gly Lys Thr Gln Met Arg Lys Ile Glu Ser Ala Thr Ser Arg
 1 5 10 15
 Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Met Lys Lys Ala Tyr
 20 25 30
 Glu Leu Ser Val Leu Cys Asp Ala Gln Leu Gly Leu Ile Val Phe Ser
 35 40 45
 Pro Arg Gly Lys Val Tyr Glu Phe Ser Ser Thr Cys Met Gln Lys Met
 50 55 60
 Leu Ala Arg Tyr Glu Lys Cys Ser Glu Gly Ser Asp Thr Ser Thr Ser
 65 70 75 80
 Lys Glu Gln Asp Val Gln Cys Leu Lys Arg Glu Ser Ala Asn Met Glu
 85 90 95
 Glu Arg Ile Glu Ile Leu Glu Ser Met Gln Arg Lys Met Leu Gly Glu
 100 105 110
 Glu Leu Ala Ser Cys Ala Leu Lys Asp Leu Asn Gln Leu Glu Ser Gln
 115 120 125
 Val Glu Arg Gly Leu Arg
 130

<210> 2268
 <211> 138
 <212> PRT
 <213> Pinus radiata

<400> 2268
 Met Gly Arg Gly Arg Val Gln Leu Arg Arg Ile Glu Asn Lys Ile Asn
 1 5 10 15
 Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
 20 25 30
 Tyr Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Ile Phe

```

          35          40          45
Ser Thr Arg Gly Lys Leu Tyr Glu Phe Ala Ser Ser Ser Met Asn Lys
    50          55          60
Thr Leu Glu Arg Tyr Glu Lys Cys Ser Tyr Ala Met Gln Asp Thr Thr
    65          70          75          80
Gly Val Ser Asp Arg Glu Ala Gln Asn Trp His Gln Glu Val Thr Lys
          85          90          95
Leu Lys Gly Lys Val Glu Leu Leu Gln Arg Ser Gln Arg His Leu Leu
          100          105          110
Gly Glu Asp Leu Gly Pro Leu Asn Val Lys Glu Leu Gln Gln Leu Glu
          115          120          125
Arg Gln Leu Glu Val Ala Leu Thr His Leu
    130          135

```

<210> 2269
 <211> 141
 <212> PRT
 <213> Pinus radiata

```

          <400> 2269
Met Gly Lys Lys Arg Val Glu Leu Lys Arg Ile Gln Asn Pro Ser Ser
    1          5          10          15
Arg His Ala Thr Phe Ser Lys Arg Lys Asn Gly Leu Leu Lys Lys Ala
          20          25          30
Phe Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Ile Phe
          35          40          45
Ser Glu Thr Gly Lys Ile Tyr Glu Phe Ala Ser Asn Asn Asp Met Ala
          50          55          60
Ala Ile Leu Gly Lys Tyr Arg Val His Glu Glu Gly Thr Glu Thr Ser
    65          70          75          80
Ser Pro Thr Ser Leu Gln Asn Val Lys Tyr His Glu Ser Gly Leu Glu
          85          90          95
Lys Leu Gln Glu Lys Leu Thr Ala Leu Gln Lys Lys Glu Lys Asn Leu
          100          105          110
Ile Gly Glu Asp Leu Glu Val Leu Thr Met Lys Glu Leu Gln Arg Leu
          115          120          125
Glu Lys Gln Leu Gln Ile Gly Ile Lys Arg Leu Val Ile
    130          135          140

```

<210> 2270
 <211> 135
 <212> PRT
 <213> Pinus radiata

```

          <400> 2270
Met Gly Lys Lys Lys Val Glu Val Lys Leu Ile Gln Asn Pro Thr Ser
    1          5          10          15
Arg Gln Gly Cys Phe Tyr Asn Arg Lys Cys Gly Leu Leu Lys Lys Ala
          20          25          30
Phe Glu Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Ile Ile Phe
          35          40          45
Ser Gln Thr Gly Lys Ile Tyr Glu Phe Ala Ser His Asp Asp Val Asn
          50          55          60
Ala Ile Leu Ala Lys Tyr Arg Ile Gln Thr Gly Thr Thr Thr Asn Ala
    65          70          75          80
Met Pro Ser Ser Leu Gln Asn Thr Glu Pro Glu Thr Leu His Glu Glu
          85          90          95
Thr Asn Met Leu Gly Lys Arg Lys Lys Val Glu Lys Leu His Glu Lys
          100          105          110
Ile Asn Met Leu Glu Lys Arg Gly Lys Asn Met Val Gly Glu Asn Leu
          115          120          125

```

Glu Ser Leu Thr Val Asn Glu
130 135

<210> 2271
<211> 118
<212> PRT
<213> Pinus radiata

<400> 2271
Met Ala Arg Gly Lys Thr Gln Met Lys Lys Ile Glu Asn Val Thr Ser
1 5 10 15
Arg Gln Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala
20 25 30
Phe Glu Leu Ser Val Leu Cys Asp Ala Glu Val Gly Leu Ile Val Phe
35 40 45
Ser Pro Ser Gly Lys Leu Tyr Glu Phe Ser Arg Pro Cys Met Gly Lys
50 55 60
Leu Leu Glu Lys Tyr Glu Lys Asn Ser Arg Glu Ser Gly Ile Asn Asn
65 70 75 80
Ala Ala Lys Glu Lys Asp Thr Gln His Ser Lys Arg Glu Ile Ala Asn
85 90 95
Met Glu Glu Lys Ile Arg Ile Leu Glu Ser Thr Glu Arg Lys Met Leu
100 105 110
Gly Gln Asn Leu Ala Ser
115

<210> 2272
<211> 147
<212> PRT
<213> Pinus radiata

<400> 2272
Met Asp Ser Phe Glu Ala Lys Gly Lys Gly Glu Lys Arg Arg Thr Val
1 5 10 15
Arg Gly Lys Thr Gln Met Lys Arg Ile Glu Asn Ala Thr Ser Arg Gln
20 25 30
Val Thr Phe Ser Lys Arg Arg Asn Gly Leu Leu Lys Lys Ala Tyr Glu
35 40 45
Leu Ser Val Leu Cys Asp Ala Glu Val Ala Leu Met Val Phe Ser Pro
50 55 60
Arg Gly Lys Leu Tyr Glu Phe Ala Asn Pro Ser Met Gln Lys Met Leu
65 70 75 80
Glu Arg Tyr Glu Lys Cys Ser Glu Gly Ser Lys Thr Thr Ser Ile Ala
85 90 95
Lys Glu Glu Asp Pro Lys Ala Leu Lys Arg Glu Ile Ala Asn Met Glu
100 105 110
Glu Arg Ile Glu Ile Leu Glu Arg Thr Gln Arg Lys Met Leu Gly Glu
115 120 125
Glu Leu Ala Ser Cys Ala Leu Lys Asp Leu Asn Gln Leu Glu Ser Gln
130 135 140
Val Glu Arg
145

<210> 2273
<211> 113
<212> PRT
<213> Pinus radiata

<400> 2273
Met Gly Arg Gly Lys Ile Glu Ile Lys Lys Ile Glu Asn Ser Val His
1 5 10 15

Arg Gln Val Thr Phe Cys Lys Arg Arg Gly Gly Leu Met Lys Lys Ala
 20 25 30
 Tyr Glu Leu Ser Val Leu Cys Asp Ala Asp Val Ala Leu Ile Val Phe
 35 40 45
 Ser Ser Arg Gly Lys Leu Tyr Glu Leu Gly Thr Ser Asn Asn Asn Asn
 50 55 60
 Asn Ser Met Arg Ser Ile Leu Glu Arg Tyr Gln Lys Cys Ser Gln Thr
 65 70 75 80
 Ala Lys His Met Asn Phe Ser Asn Asn Thr Ser Asp Glu Lys Met Lys
 85 90 95
 Gln Glu Ile Asn Leu Leu Lys Gln Gln Ile Gly Ser Ala Lys Leu Thr
 100 105 110
 Asn

<210> 2274
 <211> 97
 <212> PRT
 <213> Pinus radiata

<400> 2274
 Ser Trp Lys Ala Asn Pro Cys Thr Val Pro Ser Ser Arg Ile Gly Gly
 1 5 10 15
 Phe Gly Gly Gly Gln Val Ile Leu Pro Leu Ala His Thr Val Glu His
 20 25 30
 Glu Glu Phe Leu Glu Val Ile Lys Leu Glu Asn His Gly Leu Thr Gln
 35 40 45
 Glu Glu Ala Leu Leu Ser Arg Asp Met Phe Leu Leu Gln Leu Cys Ser
 50 55 60
 Gly Leu Asp Glu Asn Ala Val Gly Ala Cys Ala Glu Leu Val Phe Ala
 65 70 75 80
 Pro Ile Asp Ala Ser Leu Ala Asp Ser Ser Pro Leu Leu Pro Ser Gly
 85 90 95
 Phe

<210> 2275
 <211> 157
 <212> PRT
 <213> Pinus radiata

<400> 2275
 Ser Val Asp Val Leu Thr Ala Phe Ser Thr Gly Asn Gly Gly Thr Ile
 1 5 10 15
 Glu Leu Leu Tyr Met Gln Met Tyr Ala Pro Thr Thr Leu Ala Ser Ala
 20 25 30
 Arg Asp Phe Trp Thr Leu Arg Tyr Thr Ser Val Leu Glu Asp Gly Ser
 35 40 45
 Leu Val Val Cys Glu Arg Ser Leu Ser Gly Thr Gln Gly Gly Pro Ser
 50 55 60
 Met Pro Ala Val Gln Gln Phe Val Arg Ala Glu Met Gln Pro Ser Gly
 65 70 75 80
 Tyr Leu Ile Arg Pro Cys Glu Gly Gly Gly Ser Leu Ile His Ile Val
 85 90 95
 Asp His Met Asp Leu Glu Pro Trp Ser Val Pro Glu Val Leu Arg Pro
 100 105 110
 Leu Tyr Glu Ser Ser Thr Val Leu Ala Gln Lys Val Thr Met Ser Ala
 115 120 125
 Leu Arg His Leu Arg Gln Ile Ala Gln Glu Ala Ser Ser Asp Val Val
 130 135 140
 Leu Gly Trp Gly Arg Gln Pro Ala Ala Leu Arg Thr Phe

145

150

155

<210> 2276
 <211> 327
 <212> PRT
 <213> Eucalyptus grandis

<400> 2276

Met	Val	Ser	Val	Asn	Pro	Asn	Pro	Ala	Gln	Gly	Phe	Tyr	Phe	Phe	Asp
1				5					10					15	
Pro	Ala	Asn	Thr	Arg	Ile	His	Gly	Val	Asn	Ala	Gly	Ser	Ala	Ala	Glu
			20					25					30		
Gly	Gly	Gly	Ala	Ala	Pro	Pro	Tyr	Ala	Glu	Asp	Pro	Ser	Lys	Lys	Val
			35				40					45			
Arg	Lys	Pro	Tyr	Thr	Ile	Thr	Lys	Ser	Arg	Glu	Ser	Trp	Thr	Glu	Gln
	50					55					60				
Glu	His	Asp	Lys	Phe	Leu	Glu	Ala	Leu	His	Leu	Phe	Asp	Arg	Asp	Trp
65					70					75				80	
Lys	Lys	Ile	Glu	Ala	Phe	Val	Gly	Ser	Lys	Thr	Val	Ile	Gln	Ile	Arg
				85					90					95	
Ser	His	Ala	Gln	Lys	Tyr	Phe	Leu	Lys	Val	Gln	Lys	Asn	Gly	Thr	Ser
			100					105					110		
Glu	His	Val	Pro	Pro	Pro	Arg	Pro	Lys	Arg	Lys	Ala	Ala	His	Pro	Tyr
		115					120					125			
Pro	Gln	Lys	Ala	Pro	Lys	Ala	Pro	Val	Val	Ser	Gln	Val	Asn	Gly	Pro
						135					140				
Phe	Gln	Val	Ser	Ser	Ala	Phe	Leu	Glu	Pro	Gly	His	Ile	Val	Arg	Pro
145					150					155					160
Asp	Gly	Ser	Ala	Leu	Gly	Asn	Ser	Arg	Thr	Ser	Val	Ala	Leu	Ser	
				165				170					175		
Ser	Trp	Ser	His	Asn	Ser	Val	Pro	Ala	Met	Ser	Ala	Ser	Gln	Gly	Thr
			180					185					190		
Lys	Asp	Val	Gly	Ile	Ser	Gly	Pro	Pro	Val	Pro	Ser	Asn	Cys	Cys	Asn
		195					200					205			
Ser	Ser	Ser	Asn	Asp	Ser	Thr	Pro	Arg	Ser	Trp	Pro	Asn	Ala	Gln	Ala
		210				215					220				
Ile	Glu	Pro	Leu	Asp	Gln	Gln	Lys	His	Leu	Arg	Val	Met	Pro	Asp	Phe
225					230					235					240
Ala	Gln	Val	Tyr	Arg	Phe	Ile	Gly	Ser	Val	Phe	Asp	Pro	Asp	Ala	Gly
				245						250				255	
Gly	His	Leu	Gln	Arg	Leu	Lys	Gln	Met	Asp	Pro	Ile	Asn	Leu	Glu	Thr
			260					265					270		
Val	Val	Leu	Leu	Met	Lys	Asn	Leu	Ser	Ala	Asn	Leu	Thr	Ser	Pro	Glu
		275					280					285			
Phe	Glu	Lys	Tyr	Gln	His	Gly	Leu	Phe	Ala	Ser	Tyr	Glu	Gly	Gly	Pro
	290					295					300				
Glu	Lys	Ser	Lys	Ser	Gly	Gly	Ser	Phe	Lys	Leu	Leu	Pro	Glu	Lys	Ser
305					310					315					320
Gly	Ser	Leu	Ile	Leu	Ser	Ala									
				325											

<210> 2277
 <211> 225
 <212> PRT
 <213> Pinus radiata

<400> 2277

Met	Gly	Arg	Ser	Pro	Cys	Cys	Glu	Lys	Ala	His	Thr	Asn	Lys	Gly	Ala
1				5					10					15	
Trp	Thr	Lys	Gln	Glu	Asp	Asp	Arg	Leu	Ile	Ala	His	Ile	Arg	Ala	His
			20					25					30		

Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu Arg Pro Asp
 50 55 60
 Leu Lys Arg Gly Ser Phe Thr Glu Glu Glu Asp Glu Leu Ile Ile Lys
 65 70 75 80
 Leu His Ser Phe Val Gly Asn Lys Trp Ser Leu Ile Ala Gly Arg Leu
 85 90 95
 Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr His Ile
 100 105 110
 Lys Arg Lys Leu Leu Ser Lys Gly Leu Asp Pro Gln Thr His Arg Pro
 115 120 125
 Leu Gly Gln Pro Asn Asn Thr Pro Val Thr Arg Pro Val Leu Glu His
 130 135 140
 Glu Ile Pro Ala Phe Gln Asn Pro Ala Thr Pro Glu Ile Ala Asp Leu
 145 150 155 160
 Leu Gln His His Arg Leu Glu Ser Ser Pro Ile Lys Pro Ala Ala Ser
 165 170 175
 Asp Ala Glu Glu His Pro Asp Leu Asn Leu Asn Leu Cys Ile Ser Leu
 180 185 190
 Pro Ser Asn Ser Ala Pro Ala Val Asn Arg Val Ser Ser Val Asp Thr
 195 200 205
 Thr Val Asp Ser Asn Ser Asn Ser Gly Asp Gly Leu Cys Trp Gln Phe
 210 215 220
 Leu
 225

<210> 2278
 <211> 69
 <212> PRT
 <213> Pinus radiata

<400> 2278
 Met Leu Leu Gln Asn Val Pro Pro Ala Leu Leu Val Arg Phe Leu Arg
 1 5 10 15
 Glu His Arg Ser Glu Trp Ala Asp Cys Asn Ile Asp Ala Tyr Ser Ser
 20 25 30
 Ala Thr Met Lys Ala Asn Ala Tyr Asn Val Pro Gly Ser Leu Gly Gly
 35 40 45
 Ile Thr Gly Ser Gln Val Ile Leu Pro Leu Ala His Thr Val Glu His
 50 55 60
 Glu Glu Phe Leu Glu
 65

<210> 2279
 <211> 65
 <212> PRT
 <213> Eucalyptus grandis

<400> 2279
 Met Ala Arg Phe Pro Arg Val Asp Lys Ser Asn Ser Lys Lys Thr Val
 1 5 10 15
 Lys Lys Gly Ala Trp Ser Ala Glu Glu Asp Gln Lys Leu Val Ala Tyr
 20 25 30
 Ile Lys Arg Tyr Gly Ile Trp Asn Trp Thr His Met Ala Glu Pro Ala
 35 40 45
 Gly Leu Ala Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr
 50 55 60
 Leu
 65

<210> 2280
 <211> 39
 <212> PRT
 <213> Eucalyptus grandis

<400> 2280
 Pro Asn Ile Lys His Gly Asn Ile Thr Gln Glu Glu Glu Glu Ile Ile
 1 5 10 15
 Ile Asn Leu His Arg Val Leu Gly Asn Arg Trp Ala Ser Ile Ala Ser
 20 25 30
 Arg Leu Ser Gly Arg Thr Asp
 35

<210> 2281
 <211> 59
 <212> PRT
 <213> Eucalyptus grandis

<400> 2281
 Arg Lys Pro Cys Cys Asp Lys Gln Asp Thr Asn Lys Gly Ala Trp Ser
 1 5 10 15
 Lys Gln Glu Asp Gln Lys Leu Ile Asp Tyr Ile Arg Lys His Gly Glu
 20 25 30
 Gly Cys Trp Arg Thr Leu Pro Lys Ala Ala Gly Leu Leu Arg Cys Gly
 35 40 45
 Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55

<210> 2282
 <211> 48
 <212> PRT
 <213> Eucalyptus grandis

<400> 2282
 Pro Asp Leu Lys Arg Gly Asn Phe Ala Glu Asp Glu Glu Asp Leu Ile
 1 5 10 15
 Ile Lys Leu His Ala Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Ser
 35 40 45

<210> 2283
 <211> 19
 <212> PRT
 <213> Eucalyptus grandis

<400> 2283
 Cys Cys Ser Lys Lys Ala Val Lys Arg Gly Phe Trp Ser Pro Glu Glu
 1 5 10 15
 Asp Leu Lys

<210> 2284
 <211> 45
 <212> PRT
 <213> Eucalyptus grandis

<400> 2284
 Trp Thr Arg Glu Glu Asp Asn Leu Leu Ile His Ser Ile Thr Cys His
 1 5 10 15
 Gly Glu Gly Arg Trp Asn Met Leu Ala Lys Ser Ala Gly Leu Lys Arg

20 25 30
 Thr Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu
 35 40 45

<210> 2285
 <211> 57
 <212> PRT
 <213> Eucalyptus grandis

<400> 2285
 Arg Pro Asp Ile Lys Arg Gly Asn Leu Thr Pro Gln Glu Gln Leu Met
 1 5 10 15
 Ile Leu Glu Leu His His Lys Trp Gly Asn Arg Trp Ser Lys Ile Ala
 20 25 30
 Gln Tyr Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Arg
 35 40 45
 Thr Arg Val Gln Lys Gln Ala Arg Gln
 50 55

<210> 2286
 <211> 57
 <212> PRT
 <213> Eucalyptus grandis

<400> 2286
 Met Ala Ser Arg Lys Glu Val Asp Arg Ile Lys Gly Pro Trp Ser Pro
 1 5 10 15
 Glu Glu Asp Glu Ala Leu Arg Leu Leu Val Gln Lys His Gly Pro Arg
 20 25 30
 Asn Trp Ser Leu Ile Ser Lys Ser Ile Pro Gly Arg Ser Gly Lys Ser
 35 40 45
 Cys Arg Leu Arg Trp Cys Asn Gln Leu
 50 55

<210> 2287
 <211> 68
 <212> PRT
 <213> Eucalyptus grandis

<400> 2287
 Ser Pro Gln Val Glu His Arg Ala Phe Thr Pro Glu Glu Asp Asp Ile
 1 5 10 15
 Ile Val Arg Ala His Ala Arg Phe Gly Asn Lys Trp Ala Thr Ile Ala
 20 25 30
 Arg Leu Leu Ser Gly Arg Thr Asp Asn Ala Ile Lys Asn His Trp Asn
 35 40 45
 Ser Thr Leu Lys Arg Lys Cys Ser Pro Pro Leu Ser Pro Leu Ala Glu
 50 55 60
 Glu Gly Asn Asn
 65

<210> 2288
 <211> 61
 <212> PRT
 <213> Eucalyptus grandis

<400> 2288
 Met Gly Arg His Ser Cys Cys Tyr Lys Gln Lys Leu Arg Lys Gly Leu
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Glu Lys Leu Leu Arg Tyr Ile Thr Gln Tyr
 20 25 30

Gly His Gly Cys Trp Ser Ser Val Pro Lys Leu Ala Gly Leu Gln Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2289
 <211> 78
 <212> PRT
 <213> Eucalyptus grandis

<400> 2289
 Gly Ser Ser Pro Ile Asp Gly Ser Asp Gly Tyr Leu Ser Asp Asp Pro
 1 5 10 15
 Ala Pro Gly Ser Arg Ser Ser Asn Arg Arg Val Glu Arg Lys Lys Gly
 20 25 30
 Asn Pro Trp Thr Glu Glu Glu His Arg Arg Phe Leu Ile Gly Leu Gln
 35 40 45
 Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asp Phe Val Thr
 50 55 60
 Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys Tyr
 65 70 75

<210> 2290
 <211> 53
 <212> PRT
 <213> Eucalyptus grandis

<400> 2290
 Lys Lys Gly Asn Pro Trp Thr Glu Glu Glu His Arg Arg Phe Leu Ile
 1 5 10 15
 Gly Leu Gln Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asp
 20 25 30
 Phe Val Thr Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45
 Tyr Tyr Ile Arg Gln
 50

<210> 2291
 <211> 59
 <212> PRT
 <213> Eucalyptus grandis

<400> 2291
 Arg Lys Pro Cys Cys Asp Lys Arg Asp Thr Asn Lys Gly Ala Trp Ser
 1 5 10 15
 Lys Gln Glu Asp Gln Lys Leu Ile Asp Tyr Ile Gln Lys His Gly Glu
 20 25 30
 Gly Ser Trp Arg Thr Leu Pro Gln Ala Ala Gly Leu Leu Arg Cys Gly
 35 40 45
 Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55

<210> 2292
 <211> 65
 <212> PRT
 <213> Eucalyptus grandis

<400> 2292
 Pro Asp Leu Lys Arg Gly Asn Phe Ala Glu Asp Glu Glu Asp Leu Ile
 1 5 10 15
 Ile Lys Leu His Ala Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly

20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Ser
 35 40 45
 His Leu Arg Arg Lys Leu Leu Lys Met Gly Ile Asp Pro Asn Asn His
 50 55 60
 Arg
 65

<210> 2293
 <211> 54
 <212> PRT
 <213> Eucalyptus grandis

<400> 2293
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Gln Arg Leu Ile Asp Tyr Ile Arg Leu His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ser Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg
 50

<210> 2294
 <211> 65
 <212> PRT
 <213> Eucalyptus grandis

<400> 2294
 Met Ala Arg Phe Pro Arg Val Asp Lys Ser Asn Ser Lys Lys Thr Val
 1 5 10 15
 Lys Lys Gly Ala Trp Ser Ala Glu Glu Asp Gln Lys Leu Val Ala Tyr
 20 25 30
 Ile Lys Arg Tyr Gly Ile Trp Asn Trp Thr His Met Ala Glu Pro Ala
 35 40 45
 Gly Leu Ala Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr
 50 55 60
 Leu
 65

<210> 2295
 <211> 40
 <212> PRT
 <213> Eucalyptus grandis

<400> 2295
 Arg Pro Asn Ile Lys His Gly Asn Ile Thr Gln Glu Glu Glu Ile
 1 5 10 15
 Ile Ile Asn Leu His Arg Val Leu Gly Asn Arg Trp Ala Ser Ile Ala
 20 25 30
 Ser Arg Leu Ser Gly Arg Thr Asp
 35 40

<210> 2296
 <211> 41
 <212> PRT
 <213> Eucalyptus grandis

<400> 2296
 Arg Lys Gly Val Pro Trp Thr Glu Glu Glu His Arg Thr Phe Leu Met
 1 5 10 15

Gly Leu Glu Lys Met Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg Asn
 20 25 30
 Tyr Val Thr Thr Arg Thr Pro Thr Gln
 35 40

<210> 2297
 <211> 31
 <212> PRT
 <213> Eucalyptus grandis

<400> 2297
 Arg Lys Gly Val Pro Trp Thr Glu Glu Glu His Arg Thr Phe Leu Met
 1 5 10 15
 Gly Leu Glu Lys Met Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg
 20 25 30

<210> 2298
 <211> 44
 <212> PRT
 <213> Eucalyptus grandis

<400> 2298
 Glu Val Arg Lys Gly Pro Trp Thr Glu Gln Glu Asp Phe Gln Leu Val
 1 5 10 15
 Cys Phe Val Gly Leu Phe Gly Asp Arg Arg Trp Asp Phe Ile Ala Lys
 20 25 30
 Val Ser Gly Leu Lys Val Ala Gly Glu Asn Asn Arg
 35 40

<210> 2299
 <211> 61
 <212> PRT
 <213> Eucalyptus grandis

<400> 2299
 Met Gly Arg Ser Pro Cys Cys Glu Ser Glu His Met Asn Lys Gly Ala
 1 5 10 15
 Trp Ser Lys Glu Glu Asp Glu Arg Leu Ile Ala Tyr Ile Lys Arg His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2300
 <211> 67
 <212> PRT
 <213> Eucalyptus grandis

<400> 2300
 Pro Asp Leu Lys Arg Gly Asn Phe Ser Asp Glu Glu Asp Glu Leu Ile
 1 5 10 15
 Ile Thr Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Ala
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
 35 40 45
 His Ile Lys Arg Lys Leu His Ala Arg Gly Ile Asp Pro Gln Thr His
 50 55 60
 Arg Pro Leu
 65

<210> 2301
 <211> 50
 <212> PRT
 <213> Eucalyptus grandis

<400> 2301
 Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Leu Phe Leu Leu
 1 5 10 15
 Gly Leu Gln Lys Val Gly Lys Gly Asp Trp Arg Ala Ile Ser Arg Asn
 20 25 30
 Phe Val Lys Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45
 Tyr Phe
 50

<210> 2302
 <211> 53
 <212> PRT
 <213> Eucalyptus grandis

<400> 2302
 Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Leu Phe Leu Leu
 1 5 10 15
 Gly Leu Gln Lys Val Gly Lys Gly Asp Trp Arg Ala Ile Ser Arg Asn
 20 25 30
 Phe Val Lys Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45
 Tyr Phe Leu Arg Arg
 50

<210> 2303
 <211> 64
 <212> PRT
 <213> Eucalyptus grandis

<400> 2303
 Met Ala Ser Ser Ser Ser Val Ala Ser Ala Arg Lys Asp Ala Asp Arg
 1 5 10 15
 Ile Lys Gly Pro Trp Ser Pro Glu Glu Asp Glu Ala Leu Gln Arg Leu
 20 25 30
 Val Gln Ser Tyr Gly Pro Arg Asn Trp Ser Leu Ile Ser Lys Ser Ile
 35 40 45
 Pro Gly Arg Ser Gly Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu
 50 55 60

<210> 2304
 <211> 98
 <212> PRT
 <213> Eucalyptus grandis

<400> 2304
 Ser Pro Gln Val Glu His Arg Pro Phe Thr Pro Glu Glu Asp Glu Ala
 1 5 10 15
 Ile Val Arg Ala His Ala Arg Phe Gly Asn Lys Trp Ala Thr Ile Ala
 20 25 30
 Arg Leu Leu Asn Gly Arg Thr Asp Asn Ala Val Lys Asn His Trp Asn
 35 40 45
 Ser Thr Leu Lys Arg Lys Cys Ser Ser Thr Cys Ser Ala Gly Gly Asp
 50 55 60
 Asp Ala Asp Ala Leu Ala Glu Gln Gln Pro Leu Lys Arg Ser Ala Ser
 65 70 75 80

Leu Gly Thr Pro Thr Gly Gly Asn Asn Ala Val Ser Asp Leu Phe Phe
85 90 95
Ser Pro

```
<210> 2305
<211> 50
<212> PRT
<213> Eucalyptus grandis
```

[illegible]

```
<210> 2306
<211> 60
<212> PRT
<213> Eucalyptus grandis
```

<400> 2306															
Pro	Asp	Leu	Lys	Arg	Gly	Ala	Phe	Ser	Pro	Gln	Glu	Glu	Glu	Leu	Ile
1				5					10					15	
Ile	His	Leu	His	Ser	Ile	Leu	Gly	Asn	Arg	Trp	Ser	Gln	Ile	Ala	Ala
			20					25					30		
Arg	Leu	Pro	Gly	Arg	Thr	Asp	Asn	Glu	Ile	Lys	Asn	Phe	Trp	Asn	Ser
		35				40						45			
Thr	Ile	Lys	Lys	Arg	Ser	Arg	Thr	Arg	His	His	Leu				
	50					55					60				

```
<210> 2307
<211> 44
<212> PRT
<213> Eucalyptus grandis
```

```

      <400> 2307
Lys Leu Asp Phe Ser Glu Asp Glu Glu Thr Leu Val Ile Arg Met Tyr
  1          5          10          15
Asn Leu Val Gly Glu Arg Trp Ser Leu Ile Ala Gly Arg Ile Pro Gly
  20          25          30
Arg Thr Ala Glu Glu Ile Glu Lys Tyr Trp Asn Ser
  35          40

```

```
<210> 2308
<211> 61
<212> PRT
<213> Eucalyptus grandis
```

<400> 2308															
Met	Gly	Arg	Gln	Pro	Cys	Cys	Asp	Lys	Leu	Gly	Val	Lys	Lys	Gly	Pro
1				5					10					15	
Trp	Thr	Ala	Glu	Glu	Asp	Arg	Lys	Leu	Val	Asn	Phe	Ile	Leu	Thr	His
			20					25					30		
Gly	Gln	Cys	Cys	Trp	Arg	Ala	Val	Pro	Lys	Leu	Ala	Gly	Leu	Arg	Arg
		35					40					45			
Cys	Gly	Lys	Ser	Cys	Arg	Leu	Arg	Trp	Thr	Asn	Tyr	Leu			

50

55

60

<210> 2309
 <211> 64
 <212> PRT
 <213> Eucalyptus grandis

<400> 2309
 Pro Asp Leu Lys Arg Gly Leu Leu Asn Glu Ala Glu Glu Ser Leu Val
 1 5 10 15
 Ile Asp Leu His Ala Thr Leu Gly Asn Arg Trp Ser Lys Ile Ala Ala
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn His Trp Asn Thr
 35 40 45
 His Ile Lys Lys Lys Leu Ile Arg Met Gly Ile Asp Pro Val Thr His
 50 55 60

<210> 2310
 <211> 61
 <212> PRT
 <213> Eucalyptus grandis

<400> 2310
 Met Gly Arg Gln Pro Cys Cys Asp Lys Ser Gly Val Lys Lys Gly Pro
 1 5 10 15
 Trp Thr Ala Glu Glu Asp Lys Lys Leu Ile Asn Phe Ile Leu Thr Asn
 20 25 30
 Gly His Cys Cys Trp Arg Ala Val Pro Lys Leu Ala Gly Leu Arg Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu
 50 55 60

<210> 2311
 <211> 67
 <212> PRT
 <213> Eucalyptus grandis

<400> 2311
 Pro Asp Leu Lys Arg Gly Leu Leu Ser Glu Ala Glu Glu Gln Leu Val
 1 5 10 15
 Ile Asp Leu His Ala Arg Leu Gly Asn Arg Trp Ser Lys Ile Ala Ala
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn His Trp Asn Thr
 35 40 45
 His Ile Lys Lys Lys Leu Leu Lys Met Gly Ile Asp Pro Val Thr His
 50 55 60
 Glu Pro Leu
 65

<210> 2312
 <211> 50
 <212> PRT
 <213> Pinus radiata

<400> 2312
 Lys Lys Gly Val Pro Trp Ser Glu Glu Glu His Arg Met Phe Leu Tyr
 1 5 10 15
 Gly Leu Glu Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg Asn
 20 25 30
 Phe Val Thr Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45

Tyr Phe
50

<210> 2313
<211> 53
<212> PRT
<213> Pinus radiata

<400> 2313
Lys Lys Gly Val Pro Trp Ser Glu Glu Glu His Arg Met Phe Leu Tyr
1 5 10 15
Gly Leu Glu Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ser Arg Asn
20 25 30
Phe Val Thr Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
35 40 45
Tyr Phe Leu Arg Gln
50

<210> 2314
<211> 60
<212> PRT
<213> Pinus radiata

<400> 2314
Gly Lys Ser Pro Gly His Asp Glu Pro Asp Arg Ile Lys Gly Pro Trp
1 5 10 15
Ser Pro Glu Glu Asp Ala Ala Leu Gln His Phe Val Gln Lys Tyr Gly
20 25 30
Pro Arg Asn Trp Ser Leu Ile Ser Lys Ala Ile Pro Gly Arg Ser Gly
35 40 45
Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu Ser
50 55 60

<210> 2315
<211> 60
<212> PRT
<213> Pinus radiata

<400> 2315
Pro Gln Val Glu His Arg Pro Phe Thr Pro Glu Glu Asp Ala Thr Ile
1 5 10 15
Val Arg Ala His Ala Gln His Gly Asn Lys Trp Ala Thr Ile Ala Arg
20 25 30
Met Leu Ser Gly Arg Thr Asp Asn Ala Ile Lys Asn His Trp Asn Ser
35 40 45
Thr Leu Arg Arg Arg Cys Gln Gly Gly Gly Ala Leu
50 55 60

<210> 2316
<211> 20
<212> PRT
<213> Pinus radiata

<400> 2316
Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe Leu Val
1 5 10 15
Gly Leu Gln Arg
20

<210> 2317
<211> 18

<212> PRT
 <213> Pinus radiata

<400> 2137
 Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe Leu Val
 1 5 10 15
 Gly Leu

<210> 2318
 <211> 10
 <212> PRT
 <213> Pinus radiata

<400> 2318
 Lys Arg Gly Val Pro Trp Thr Glu Glu Glu
 1 5 10

<210> 2319
 <211> 14
 <212> PRT
 <213> Pinus radiata

<400> 2319
 Lys Arg Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe
 1 5 10

<210> 2320
 <211> 68
 <212> PRT
 <213> Pinus radiata

<400> 2320
 Met Arg Cys Thr Arg Trp Gln Gly Leu Pro Phe Ser Ser Lys Pro Lys
 1 5 10 15
 Val Lys Lys Gly Leu Trp Ser Pro Glu Glu Asp Glu Lys Leu Ile Asn
 20 25 30
 Tyr Met Met Lys Asn Gly Leu Leu Gly Cys Ser Trp Ser Tyr Val Ala
 35 40 45
 Lys Gln Ile Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp
 50 55 60
 Thr Asn Tyr Leu
 65

<210> 2321
 <211> 62
 <212> PRT
 <213> Pinus radiata

<400> 2321
 Met Gly Arg Ala Pro Cys Cys Asp Lys Ala Asn Val Lys Lys Gly Pro
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Thr Lys Leu Lys Ala Phe Ile Glu Gln His
 20 25 30
 Gly Thr Gly Gly Asn Trp Ile Ala Leu Pro Gln Lys Ala Gly Leu Lys
 35 40 45
 Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu
 50 55 60

<210> 2322
 <211> 60

<212> PRT
<213> Pinus radiata

<400> 2322
Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
1 5 10 15
Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
20 25 30
Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
35 40 45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr
50 55 60

<210> 2323
<211> 46
<212> PRT
<213> Pinus radiata

<400> 2323
Arg Pro Asp Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu
1 5 10 15
Ile Ile Lys Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala
20 25 30
Gly Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr
35 40 45

<210> 2324
<211> 61
<212> PRT
<213> Pinus radiata

<400> 2324
Met Gly Arg Ala Pro Cys Cys Glu Lys Val Gly Leu Lys Lys Gly Pro
1 5 10 15
Trp Thr Pro Glu Glu Asp Gln Lys Leu Leu Ala Tyr Ile Gln Glu His
20 25 30
Gly His Gly Ser Trp Arg Ala Leu Pro Gln Lys Ala Gly Leu Leu Arg
35 40 45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu
50 55 60

<210> 2325
<211> 61
<212> PRT
<213> Pinus radiata

<400> 2325
Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
1 5 10 15
Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
20 25 30
Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
35 40 45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
50 55 60

<210> 2326
<211> 45
<212> PRT
<213> Pinus radiata

<400> 2326
 Pro Asp Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Val
 1 5 10 15
 Ile Lys Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr
 35 40 45

<210> 2327
 <211> 50
 <212> PRT
 <213> Pinus radiata

<400> 2327
 Lys Lys Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe Leu Leu
 1 5 10 15
 Gly Leu Gln Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asn
 20 25 30
 Phe Val Ile Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45
 Tyr Phe
 50

<210> 2328
 <211> 53
 <212> PRT
 <213> Pinus radiata

<400> 2328
 Lys Lys Gly Val Pro Trp Thr Glu Glu Glu His Arg Met Phe Leu Leu
 1 5 10 15
 Gly Leu Gln Lys Leu Gly Lys Gly Asp Trp Arg Gly Ile Ala Arg Asn
 20 25 30
 Phe Val Ile Thr Arg Thr Pro Thr Gln Val Ala Ser His Ala Gln Lys
 35 40 45
 Tyr Phe Ile Arg Gln
 50

<210> 2329
 <211> 48
 <212> PRT
 <213> Pinus radiata

<400> 2329
 Gln Arg Glu Arg Trp Ser Glu Asp Glu His Leu Lys Phe Leu Glu Ala
 1 5 10 15
 Leu Lys Met Tyr Gly Arg Ala Trp Arg Arg Ile Glu Glu His Ile Gly
 20 25 30
 Thr Lys Thr Ala Val Gln Ile Arg Ser His Ala Gln Lys Phe Phe Ser
 35 40 45

<210> 2330
 <211> 42
 <212> PRT
 <213> Pinus radiata

<400> 2330
 Gln Arg Glu Arg Trp Ser Glu Asp Glu His Leu Lys Phe Leu Glu Ala
 1 5 10 15
 Leu Lys Met Tyr Gly Arg Ala Trp Arg Arg Ile Glu Glu His Ile Gly
 20 25 30

Thr Lys Thr Ala Val Gln Ile Arg Ser His
35 40

<210> 2331
<211> 61
<212> PRT
<213> Pinus radiata

<400> 2331
Met Gly Arg Thr Pro Cys Cys Leu Lys Val Gly Leu Asn Arg Gly Pro
1 5 10 15
Trp Thr Pro Glu Glu Asp Leu Cys Leu Ser Asn Tyr Ile Glu Ala His
20 25 30
Gly Glu Gly Gly Trp Arg Thr Leu Pro Lys Lys Ala Gly Leu Leu Arg
35 40 45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu
50 55 60

<210> 2332
<211> 67
<212> PRT
<213> Pinus radiata

<400> 2332
Pro Asp Val Lys His Gly His Ile Leu Pro Glu Glu Glu Asp Leu Ile
1 5 10 15
Leu Arg Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly
20 25 30
Arg Met Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Thr
35 40 45
His Leu Ser Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His
50 55 60
Lys Pro Leu
65

<210> 2333
<211> 55
<212> PRT
<213> Pinus radiata

<400> 2333
Cys Glu Asp Leu Asp Arg Ile Lys Gly Pro Trp Ser Pro Glu Glu Asp
1 5 10 15
Ala Ser Leu Gln Arg Leu Val Gln Lys Tyr Gly Pro Arg Asn Trp Thr
20 25 30
Leu Ile Ser Lys Gly Ile Pro Gly Arg Ser Gly Lys Ser Cys Arg Leu
35 40 45
Arg Trp Cys Asn Gln Leu Ser
50 55

<210> 2334
<211> 56
<212> PRT
<213> Pinus radiata

<400> 2334
Lys Gly Pro Trp Ser Pro Glu Glu Asp Ala Ser Leu Gln Arg Leu Val
1 5 10 15
Gln Lys Tyr Gly Pro Arg Asn Trp Thr Leu Ile Ser Lys Gly Ile Pro
20 25 30
Gly Arg Ser Gly Lys Ser Cys Arg Leu Arg Trp Cys Asn Gln Leu Ser

35 40 45
 Pro Gln Val Glu His Arg Pro Phe
 50 55
 <210> 2335
 <211> 34
 <212> PRT
 <213> Pinus radiata
 <400> 2335
 Met Gly Ala Pro Lys Gln Lys Trp Thr Ser Glu Glu Glu Gly Ala Leu
 1 5 10 15
 Arg Ala Gly Val Glu Lys Tyr Gly Ala Gly Lys Trp Gln Thr Ile Leu
 20 25 30
 Lys Asp

<210> 2336
 <211> 51
 <212> PRT
 <213> Pinus radiata
 <400> 2336
 Leu Arg Lys Gly Leu Trp Ser Pro Asp Glu Asp Ile Glu Leu Thr Thr
 1 5 10 15
 Tyr Ile Met Arg Lys Gly Leu Met Gly Cys Trp Asn Tyr Ile Ala Lys
 20 25 30
 Gln Ala Gly Leu Gln Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile
 35 40 45
 Asn Tyr Leu
 50

<210> 2337
 <211> 45
 <212> PRT
 <213> Pinus radiata
 <400> 2337
 Pro Gly Leu Lys Arg Cys Ala Ile Ser Pro Gln Glu Glu Arg Leu Ile
 1 5 10 15
 Ile Gln Leu Gln Ser Ser Leu Gly Asn Arg Trp Ser Gln Ile Ala Ala
 20 25 30
 His Leu Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr
 35 40 45

<210> 2338
 <211> 62
 <212> PRT
 <213> Pinus radiata
 <400> 2338
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Gln Gln Glu Asp Thr Arg Leu Val Ala His Ile Arg Ala His
 20 25 30
 Gly Gln Gly Gly Trp Ser Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Gln Arg Trp Ile Asn Tyr Leu His
 50 55 60

<210> 2339

<211> 39
 <212> PRT
 <213> Pinus radiata

<400> 2339
 Pro Asp Leu Lys Arg Ser Asn Phe Ser Glu Glu Glu Asp Glu Leu Ile
 1 5 10 15
 Val Arg Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp
 35

<210> 2340
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2340
 Gly Thr His Pro Ala Pro Ser Lys Pro Lys Leu Arg Lys Gly Leu Trp
 1 5 10 15
 Ser Pro Val Glu Asp Asn Gln Leu Thr Asn Tyr Ile Leu Arg Arg Gly
 20 25 30
 Leu Val Gly Cys Trp Asn Tyr Val Ala Lys Gln Ala Gly Leu Gln Arg
 35 40 45
 Thr Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2341
 <211> 43
 <212> PRT
 <213> Pinus radiata

<400> 2341
 Pro Gly Leu Lys Arg His Pro Ile Ser Arg Gln Glu Glu Gln Leu Ile
 1 5 10 15
 Ile Glu Leu Gln Ser Ile Leu Gly Asn Arg Trp Ser Gln Ile Ala Ala
 20 25 30
 Gln Leu Pro Gly Arg Thr Asp Ile Glu Ile Lys
 35 40

<210> 2342
 <211> 61
 <212> PRT
 <213> Eucalyptus grandis

<400> 2342
 Met Gly Arg His Ser Cys Cys Tyr Lys Gln Lys Leu Arg Lys Gly Leu
 1 5 10 15
 Trp Ser Pro Glu Glu Asp Glu Lys Leu Leu Arg His Ile Ser Gln Tyr
 20 25 30
 Gly His Gly Cys Trp Ser Ser Val Pro Lys Gln Ala Gly Leu Gln Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2343
 <211> 67
 <212> PRT
 <213> Eucalyptus grandis

<400> 2343

Pro Asp Leu Lys Arg Gly Ala Phe Ser Gln Asp Glu Glu Asp Leu Ile
 1 5 10 15
 Ile Glu Leu His Ala Ala Leu Gly Asn Lys Trp Ser Gln Ile Ala Ala
 20 25 30
 Asn Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Leu Trp Asn Ser
 35 40 45
 Cys Leu Lys Lys Lys Leu Arg Gln Arg Gly Ile Asp Pro Val Ser His
 50 55 60
 Arg Pro Leu
 65

<210> 2344
 <211> 58
 <212> PRT
 <213> Eucalyptus grandis

<400> 2344
 Thr Pro Cys Cys Ser Lys Val Gly Ile Lys Arg Gly Pro Trp Thr Pro
 1 5 10 15
 Glu Glu Asp Glu Val Leu Ala Ser Tyr Val Arg Arg Glu Gly Glu Gly
 20 25 30
 Arg Trp Arg Thr Leu Pro Lys Arg Ala Gly Leu Gln Arg Cys Gly Lys
 35 40 45
 Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu
 50 55

<210> 2345
 <211> 67
 <212> PRT
 <213> Eucalyptus grandis

<400> 2345
 Pro Ser Val Lys Arg Gly Gln Ile Ala Pro Asp Glu Glu Asp Leu Ile
 1 5 10 15
 Leu Arg Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Ile Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
 35 40 45
 His Leu Ser Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His
 50 55 60
 Lys Pro Leu
 65

<210> 2346
 <211> 67
 <212> PRT
 <213> Eucalyptus grandis

<400> 2346
 Met Asp Lys Lys Pro Asp Asp Asp Ser Gly Lys Ser Gln Asp Val Glu
 1 5 10 15
 Val Arg Lys Gly Pro Trp Thr Met Glu Glu Asp Leu Ile Leu Ile Asn
 20 25 30
 Tyr Ile Ala Asn His Gly Glu Gly Ser Trp Asn Ser Leu Ala Lys Ala
 35 40 45
 Ala Gly Leu Lys Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn
 50 55 60
 Tyr Leu Arg
 65

<210> 2347

<211> 56
 <212> PRT
 <213> Eucalyptus grandis

<400> 2347
 Pro Asp Val Arg Arg Gly Asn Ile Thr Thr Glu Glu Gln Leu Leu Ile
 1 5 10 15
 Met Glu Leu His Ala Lys Trp Gly Asn Arg Trp Ser Lys Ile Ala Lys
 20 25 30
 His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Phe Trp Arg Thr
 35 40 45
 Arg Ile Gln Lys His Ile Lys Gln
 50 55

<210> 2348
 <211> 63
 <212> PRT
 <213> Eucalyptus grandis

<400> 2348
 Met Asp Lys Lys Pro Cys Tyr Arg Thr Gln Asp Pro Gln Val Arg Lys
 1 5 10 15
 Gly Pro Trp Thr Leu Glu Glu Asp Leu Ile Leu Met Asp Tyr Ile Ala
 20 25 30
 Asn His Gly Glu Gly Val Trp Asn Ser Leu Ala Lys Ala Ala Gly Leu
 35 40 45
 Gln Arg Thr Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu
 50 55 60

<210> 2349
 <211> 54
 <212> PRT
 <213> Eucalyptus grandis

<400> 2349
 Pro Asp Val Arg Arg Gly Asn Ile Thr Pro Glu Glu Gln Leu Leu Ile
 1 5 10 15
 Ile His Leu Gln Ser Met Trp Gly Asn Arg Trp Ser Glu Ile Ala Lys
 20 25 30
 His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Arg Thr
 35 40 45
 Lys Ile Gln Lys His Ile
 50

<210> 2350
 <211> 47
 <212> PRT
 <213> Eucalyptus grandis

<400> 2350
 Ser Arg Glu Ser Trp Thr Glu Gln Glu His Asp Lys Phe Leu Glu Ala
 1 5 10 15
 Leu His Leu Phe Asp Arg Asp Trp Lys Lys Ile Glu Ala Phe Val Gly
 20 25 30
 Ser Lys Thr Val Ile Gln Ile Arg Ser His Ala Gln Lys Tyr Phe
 35 40 45

<210> 2351
 <211> 59
 <212> PRT
 <213> Eucalyptus grandis

<400> 2351
 Ser Trp Thr Glu Gln Glu His Asp Lys Phe Leu Glu Ala Leu His Leu
 1 5 10 15
 Phe Asp Arg Asp Trp Lys Lys Ile Glu Ala Phe Val Gly Ser Lys Thr
 20 25 30
 Val Ile Gln Ile Arg Ser His Ala Gln Lys Tyr Phe Leu Lys Val Gln
 35 40 45
 Lys Asn Gly Thr Ser Glu His Val Pro Pro Pro
 50 55

<210> 2352
 <211> 45
 <212> PRT
 <213> Pinus radiata

<400> 2352
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Gln Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
 20 25 30
 Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly
 35 40 45

<210> 2353
 <211> 45
 <212> PRT
 <213> Pinus radiata

<400> 2353
 Met Gly Arg Ala Pro Cys Cys Glu Lys Val Gly Leu Lys Lys Gly Pro
 1 5 10 15
 Trp Thr Pro Glu Glu Asp Gln Lys Leu Val Thr Tyr Ile Gln Glu His
 20 25 30
 Gly His Gly Ser Trp Arg Ala Leu Pro Gln Lys Ala Gly
 35 40 45

<210> 2354
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2354
 Met Gly Arg Ser Pro Cys Cys Ala Lys Glu Gly Leu Asn Arg Gly Ala
 1 5 10 15
 Trp Thr Lys Thr Glu Asp Ile Ile Leu Ser Glu Tyr Ile Arg Ile His
 20 25 30
 Gly Asp Gly Gly Trp Arg Ser Leu Pro Lys Lys Ala Gly Leu Lys Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Leu Asn Tyr Leu
 50 55 60

<210> 2355
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2355
 Met Gly Arg Ala Pro Cys Cys Ser Asn Asp Asp Arg Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Gln Tyr Ile Lys Val His

20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2356
 <211> 68
 <212> PRT
 <213> Pinus radiata

<400> 2356
 Pro Asp Leu Lys Arg Gly Phe Phe Ser Glu Asp Glu Asp Asp Leu Ile
 1 5 10 15
 Leu Lys Leu His Ala Leu Leu Gly Asn Asn Arg Trp Ser Leu Ile Ala
 20 25 30
 Gly Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn
 35 40 45
 Ser His Leu Lys Arg Lys Leu Ile Ser Met Gly Ile Asp Pro Leu Thr
 50 55 60
 His Arg Pro Phe
 65

<210> 2357
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2357
 Met Gly Arg Ala Pro Cys Cys Ser Asn Gly Asp Arg Asn Lys Gly Ala
 1 5 10 15
 Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Gln Tyr Ile Lys Val His
 20 25 30
 Gly Glu Gly Cys Trp Arg Ser Leu Pro Asn Ala Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50 55 60

<210> 2358
 <211> 39
 <212> PRT
 <213> Pinus radiata

<400> 2358
 Pro Asp Leu Lys Arg Gly Phe Phe Ser Glu Asp Glu Asp Asp Leu Ile
 1 5 10 15
 Leu Lys Leu His Ala Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Leu Pro Gly Arg Thr Asp
 35

<210> 2359
 <211> 62
 <212> PRT
 <213> Pinus radiata

<400> 2359
 Met Gly Arg Thr Pro Cys Cys Glu Lys Asn Ile Gly Leu Lys Lys Gly
 1 5 10 15
 Pro Trp Thr Pro Glu Glu Asp Gln Lys Leu Ile Asp Tyr Ile Gln Ser
 20 25 30

His Gly His Gly Ser Trp Arg Ala Leu Pro Lys Arg Ala Gly Leu Leu
 35 40 45
 Arg Cys Gly Lys Ser Cys Arg Leu Arg Trp Thr Asn Tyr Leu
 50 55 60

<210> 2360
 <211> 66
 <212> PRT
 <213> Pinus radiata

<400> 2360
 Pro Asp Ile Lys Arg Gly Gln Phe Ser Phe Glu Glu Glu Gln Thr Ile
 1 5 10 15
 Ile Glu Leu His Ala Val Leu Gly Asn Lys Trp Ser Thr Ile Ala Gly
 20 25 30
 His Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
 35 40 45
 His Leu Lys Lys Arg Leu Leu Gln Met Gly Ile Asp Pro Val Thr His
 50 55 60
 Arg Pro
 65

<210> 2361
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2361
 Met Gly Arg Thr Pro Cys Cys Leu Lys Val Gly Leu Asn Arg Gly Pro
 1 5 10 15
 Trp Thr Pro Glu Glu Asp Leu Cys Leu Ser Asn Tyr Ile Glu Ala His
 20 25 30
 Gly Glu Gly Gly Trp Arg Thr Leu Pro Lys Lys Ala Gly Leu Leu Arg
 35 40 45
 Cys Gly Lys Ser Cys Arg Leu Arg Trp Met Asn Tyr Leu
 50 55 60

<210> 2362
 <211> 67
 <212> PRT
 <213> Pinus radiata

<400> 2362
 Pro Asp Val Lys His Gly His Ile Leu Pro Glu Glu Glu Asp Leu Ile
 1 5 10 15
 Leu Arg Leu His Arg Leu Leu Gly Asn Arg Trp Ser Leu Ile Ala Gly
 20 25 30
 Arg Met Pro Gly Arg Thr Asp Asn Glu Val Lys Asn Tyr Trp Asn Thr
 35 40 45
 His Leu Ser Lys Lys Leu Ile Ser Gln Gly Ile Asp Pro Arg Thr His
 50 55 60
 Lys Pro Leu
 65

<210> 2363
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2363
 Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala

```

      1           5           10           15
Trp Thr Lys Gln Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
      20           25           30
Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
      35           40           45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
      50           55           60

```

<210> 2364
 <211> 67
 <212> PRT
 <213> Pinus radiata

```

      <400> 2364
Pro Asp Leu Lys Arg Gly Ser Phe Thr Glu Glu Glu Asp Glu Leu Ile
      1           5           10           15
Ile Lys Leu His Ser Phe Val Gly Asn Lys Trp Ser Leu Ile Ala Gly
      20           25           30
Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
      35           40           45
His Ile Lys Arg Lys Leu Leu Ser Lys Gly Leu Asp Pro Gln Thr His
      50           55           60
Arg Pro Leu
      65

```

<210> 2365
 <211> 61
 <212> PRT
 <213> Pinus radiata

```

      <400> 2365
Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
      1           5           10           15
Trp Thr Lys Gln Glu Asp Asp Arg Leu Ile Ala His Ile Arg Ala His
      20           25           30
Gly Glu Gly Gly Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Leu Arg
      35           40           45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
      50           55           60

```

<210> 2366
 <211> 67
 <212> PRT
 <213> Pinus radiata

```

      <400> 2366
Pro Asp Leu Lys Arg Gly Ser Phe Thr Glu Glu Glu Asp Glu Leu Ile
      1           5           10           15
Ile Lys Leu His Ser Phe Val Gly Asn Lys Trp Ser Leu Ile Ala Gly
      20           25           30
Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
      35           40           45
His Ile Lys Arg Lys Leu Leu Ser Lys Gly Leu Asp Pro Gln Thr His
      50           55           60
Arg Pro Leu
      65

```

<210> 2367
 <211> 61
 <212> PRT
 <213> Pinus radiata

<400> 2367

```

Met Gly Arg Ser Pro Cys Cys Glu Lys Ala His Thr Asn Lys Gly Ala
 1           5           10           15
Trp Thr Lys Glu Glu Asp Asp Arg Leu Ile Ala His Ile Arg Thr His
          20           25           30
Gly Glu Gly Cys Trp Arg Ser Leu Pro Lys Ala Ala Gly Leu Met Arg
          35           40           45
Cys Gly Lys Ser Cys Arg Leu Arg Trp Ile Asn Tyr Leu
 50           55           60

```

<210> 2368

<211> 67

<212> PRT

<213> Pinus radiata

<400> 2368

```

Pro Asp Leu Lys Arg Gly Asn Phe Ser Glu Glu Glu Asp Glu Leu Val
 1           5           10           15
Ile Lys Leu His Ser Leu Leu Gly Asn Lys Trp Ser Leu Ile Ala Gly
          20           25           30
Arg Leu Pro Gly Arg Thr Asp Asn Glu Ile Lys Asn Tyr Trp Asn Thr
          35           40           45
His Ile Lys Arg Lys Leu Leu Asn Arg Gly Leu Asp Pro Gln Ser His
 50           55           60
Arg Pro Leu
65

```